

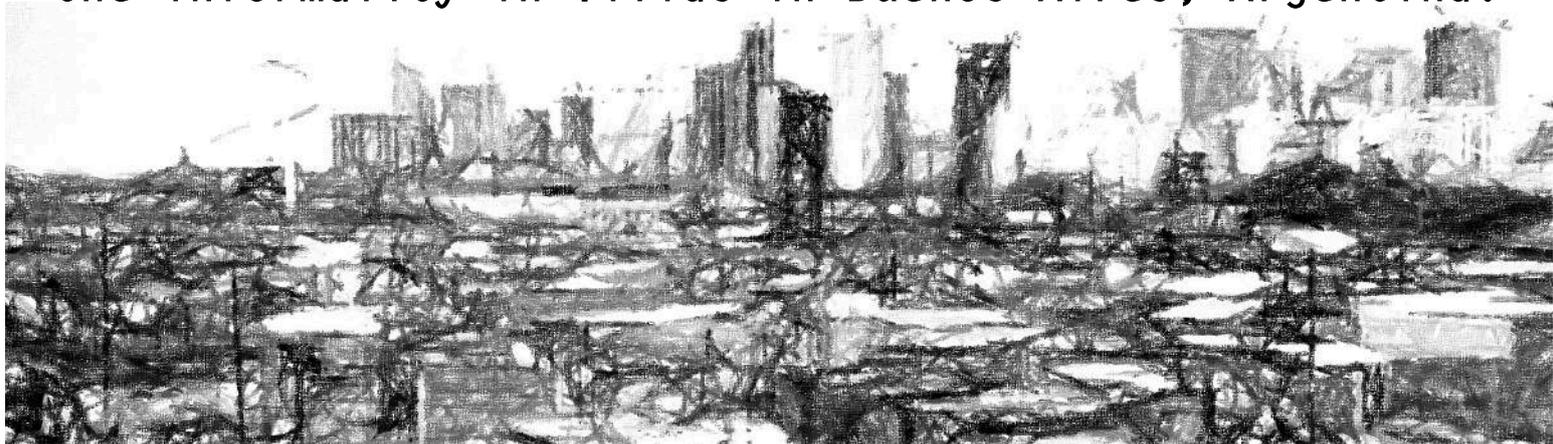


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UNIVERSITY OF GRONINGEN  
 FACULTY OF SPATIAL SCIENCES

Master Thesis-  
 MSc Environmental and Infrastructure Planning

Understanding the concept of self-organization within  
 the informality in Villas in Buenos Aires, Argentina.



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 August 2015



## ACKNOWLEDGEMENTS

This Master Thesis presents one of the most worrying problems Latin American cities are facing: slums. It has been a great challenge for me and I have worked with enthusiasm in order to deliver this research. Therefore I would like to thank all the people that have helped me during this time.

Thanks God for this wonderful opportunity and amazing life experience.

I would like to express my gratitude to my supervisor, Katharina Gugerell, for her guidance and advice, but most important, for her support and good will to clear my doubts.

I am deeply grateful to my family and friends back home. Thank you for your love and support, specially my beloved parents, who have always encouraged me in life and have given me the tools needed for a good education. I would also want to mention my appreciation to the PEACE Project team from Erasmus Mundus, for believing in me and giving me the chance to study abroad. It has enriched my knowledge and has helped me to become a better person. I will never forget this amazing year in Groningen.

I also want to thank my classmates, my floor mate and my friends that were my support during this time. This experience would not be the same without you all. Our friendship is one of the most valuable things I have gained.

At last, but not least, I would like to mention Maria del Carmen, my first teacher in life and the person who lights my path every day. This thesis is for you.

Maria Constanza Almeida

## ABSTRACT

Slums are established as a solution for the urban poor in Developing World cities. These places are characterized by the lack of sanitation and inappropriate water supply, poor housing conditions, dangerous locations, limited access to employment, high levels of insecurity and detrimental environmental conditions. In Argentina, there are a consequence of economic crisis, poverty, weak planning policies and lack of governmental and social commitment. This is why the villeros (slum's dwellers) started to seek alternative outcomes to realize their needs through spontaneous actions outside the regulatory framework occupying vacant land owned by the state. In addition they have changed the character of those places from empty plots to poor neighborhoods and the situation has resulted in the emergence of different patterns within the villas: social, institutional and spatial patterns. Thus these spontaneous actions make essential to contemplate the concept of self-organization and transitions in order to understand the spatial development and growth of these slums. Hence this research aims to study these patterns, how are the villas of Buenos Aires Autonomous City self-organized and if they have experienced a transition process. In order to answer these questions Case study approach is selected as the research strategy. The methods used to analyze two villas from CABA are data analysis and spatial analysis through maps and images from different periods. The findings expose that the case studies show self-organized characteristics since their inhabitants act collectively and spontaneously in reaction to many contextual situations. As a consequence, socio-spatial patterns have emerged that give structure and lead the self-organization process. Moreover the villas are experiencing a transition process, which is now in the acceleration phase.

*Key words: self-organization, transitions, villas, spatial development, social patterns, spatial patterns, institutional patterns*

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## Abbreviations and Glossary

**Slums:** Neighborhoods with limited access to income and employment; inappropriate water supply, precarious sanitation, overcrowded and improper housing, risky locations, spatial issues, insecurity of tenure and vulnerability to serious health problems and limited access to public and social services (State of the World's Cities Report 2012/2013: Prosperity of Cities from the UN Human Settlements Programme UN-HABITAT).

**Self-organization:** universal phenomenon that happens across a broad variety of disciplines (Bolliger et al, 2003). It results from the interaction and interconnection of complex contexts' elements. This kind of systems is flexible within their environment and robust at the same time. (De Roo, 2010).

**CABA:** Ciudad Autónoma de Buenos Aires (Buenos Aires Autonomous City).

**INDEC:** Instituto Nacional de Estadística y Censos (National Institute of Statistics and Censuses).

**NHT:** Núcleo Habitacional Transitorio (Transitory Housing Core).

**PROMEBA:** Programa de Mejoramiento Barrial (Neighborhood Improvement Program).

**Villa:** Argentinian name for Slums.

**Villero:** Argentinian designation for a slum's resident.

## **CHAPTER ONE: Background of the study.**

### **1.1 Introduction: Slums. Self-organization.**

One of every three urban citizens lives in slum conditions across the world today (Acioly, 2007, p.2). Nowadays slums are by far, one of the biggest challenges for planners. The number of people living under extreme poor conditions especially in Developing World countries is alarming and definitively a hot topic to deal with- UN-Habitat has estimated around 863 million people- (UN-Habitat, 2013). For a better understanding of the term ‘slum’ or ‘villa’ (the Argentinian name), UN-Habitat has readopted this word recently and defined it as the inadequate access to safe water and sanitation; poor structural quality and dangerous position; overpopulation; and insecure residential status (UN-Habitat, 2012/2013). Through the last years, slums have developed rapidly into the urban fabric and suburbs of the cities. Slums are the consequence of the sum of individual occupations over time and they have high population densities. Houses are built first with waste materials, and later are gradually improved (Almansi, 2009).

This situation has turned the cities into fragmented pieces. On the one hand, there is the formal city that has been planned; on the other hand the informal city that has emerged without plans and functions without proper infrastructure and services. Therefore the slums dwellers are no longer able to enjoy their living conditions, they have been denied to the right to the city. Besides, they have been also neglected from society and they cannot make use of basic infrastructure and services, such as sewage, garbage collection, electricity, etc. Thus these people started to look for solutions in order to fulfill their basic needs via autonomous community-based networks (self-organization) ‘outside’ government control, participating in the development of the ‘urban fabric’ (Boonstra and Boelens, 2001). This is why it can be argued that the society is not the result of one governmental perspective only, but of an endless variety of elements with all their diversity and dynamics. Therefore it is worth to say that a city functions as a system with a constant interaction of its elements or subsystems, being the villas one of them (Boonstra and Boelens, 2011).

### **1.2 Problem Statement.**

By the first half of the 20th century, Argentina was named the ‘world’s barn’ with a stable economy principally based on agriculture and exportation to Europe being one of the richest countries in the world (Bossini, 2008). In the second half of the century, the situation drastically changed due to political instability. Consequently, after a coup d’état and political struggles (the return of the democracy at power in the 80s), the country suffered several changes ending up in an economic crisis that still strikes Argentinian society. A broad gap between wealthy upper and lower class, high levels of poverty and illiteracy, lack of employment and housing and infrastructure deficiency

characterize the cities, specially the capital, Buenos Aires Autonomous City (CABA), being one of the biggest cities of Latin America (Bossini, 2008).

In addition, the country has always lacked a strong land policy or a land use planning policy and this remains the case today. Land was always considered a basic resource for wealth creation rather than a common good for the whole society (Almansi, 2009). In Argentina there are three levels of government that are responsible for the decision making and planning policies. The national level, which has only one law regarding social and land issues; it allows the provision of legal land title to people who could prove that the land had been purchased. The provincial and local levels have a lack of appropriate laws and there is a wide gap within the national level turning the planning processes cumbersome. This situation exposed above has resulted in the emergence of different patterns related to the slum's growth: social, institutional and spatial. With this respect, slums are also influencing the urban fabric's fragmentation. Because these slums or villas have appeared spontaneously in some way, they could be seen as self-organized processes in which the urban poor seek alternative solutions for the improvement of their deprived condition.

'Sometimes spontaneous regeneration can be stopped in its tracks by attempts at planned regeneration, which tends to be manufactured from the top down. In the same way, if they become overloaded, their networks jam, but in general, because cities operate from the bottom up through the actions of millions of individuals, they tend to adjust easily and quickly to changed circumstances' (Baty 2009, p.54). Therefore the aspiration of this research is to study the emergence of these patterns through spontaneous behaviors and actions in villas in Buenos Aires and identify how are villas organized/ self-organized. Thus, identify key elements that could be useful to understand how these villas are organized or self-organized. This research could be useful for future upgrading and planning approaches seeking to bridge the gap between the formal and informal city.

## 1.2 Research objectives and research questions.

The aim of this research is to study the emergence of different patterns (spatial, social and institutional) concerned with the growth and change of the slums in Buenos Aires Autonomous City's (CABA) and identify if there is a relation with self-organized processes. Furthermore, examine and investigate key features in order to find its relevance within the city. The findings from this research could be used to strengthen the existing planning and upgrading programs such as PROMEBA.

In order to achieve the desired objective exposed above a main research question is given:

**How are the Slums (Villas) of Buenos Aires Autonomous City organized/ self-organized?**

## Sub research questions are given to support the study:

1. How does the development of these patterns influence the growth of a slum?
2. What drives the growth of the villas?
3. Are villas experiencing a transition process?
4. What is important to consider for the upgrading and planning programs? Can the concept of self-organization be used as a tool?

### 1.3 Research methodology.

In order to answer the research questions of the study in the best way possible, the methodology for this research will be case study since according to Yin (1994) it allows professionals to retain the holistic and meaningful characteristics of real-life events (e.g. neighborhoods growth). The distinguishing need for this methodology results from the aspiration to understand complex social phenomena (Yin, 1994). The chosen cases are two of the biggest villas of CABA:

Villa	Location	Stage of formation
Villa 31 and 31 bis	East side	Consolidated/83 years
Villa 21-24 NHT Zavaleta	South of the city	Consolidated/70-75 years

Table 1.1. Source: Author, 2015

The methodology and analysis methods are explained in detail in chapter three.

### 1.4 Thesis structure.

The thesis is structured in six chapters organized as the description below:

**Chapter one:** explains the background of the study. It is conformed by an introduction, a problem statement, research objectives and research questions, the methodology and structure of the investigation.

**Chapter two:** is focused on the literature review and theoretical framework. It gives an introduction on the topic, state of art of slums and self-organization, key concepts of self-organization and transitions.

**Chapter three:** describes the research methodology selected: Case studies. It also explains the research strategy and how the data has been collected and analyzed.

**Chapter four:** is about the background of the slums and planning system in Argentina. Introduction of the case studies and the city context will be presented, with key concepts and characteristics of the villas. Planning system and land tenure system in Argentina and existing Upgrading programs will be also analyzed.

**Chapter five:** is dedicated to the Case Study Analysis of two slums in CABA (Villa 31 and 31bis, and Villa 21-24 NHT Zavaleta). It also involves the discussion on case studies and preliminary conclusions.

**Chapter six:** this chapter provides the conclusions and findings achieved after the case studies analysis and discussion. It will also provide recommendations and suggestions for the upgrading programs and future research.

**Bibliography.**

## CHAPTER TWO: Theoretical Framework

### 2.1 Introduction

According to State of the World's Cities Report 2012/2013: Prosperity of Cities (UN-HABITAT, 2012/2013), cities around the globe are expanding in a discontinuous, scattered and low-density form that is not sustainable. They are becoming endless expanses, with high degrees of fragmentation of the urban fabric resulting in vast interstitial open spaces. At their periphery, residential neighborhoods are characterized by low-density developments that, along with under-used spaces and fragmented built-up areas in the intermediate city-rings, are contributing to dramatic reductions in residential densities.

According to Rodgers et al (2012) the “culture of poverty” has created a particular perception of Latin America cities, which came to be widely seen as constituted on the one hand of bustling, modernizing, progressive areas (commonly in the center) and problematic, unproductive, and insecure areas (generally on the periphery) (Rodgers et al, 2012). Moreover these areas also show uncertainty regarding their development, which as Jáuregui (2012) explains it is always a potential. The key is to understand how to foster this potential within slums' areas, which have emerged as complex systems of social connections reflecting the flexibility of informality (Ramirez, 2012).

Consequently, for a better understanding of the uncertainty's potential from slum's areas, its spontaneity and how to maximize it within the city, an analysis of self-organization will be conducted since, according to Bolliger et al (2003) self-organization is related to the development of different actions of complex structures in which systems emerge in a spontaneous way, driven internally by their own variations. Hence, a connection with slums can be made since, they have developed over time by their own and in which the creativity and agency from the dwellers is essential (Hernandez and Kellett, 2012). Thus, the aim of this chapter is to study, first the informality as a feature from Latin American cities. Second, analyze the concept of self-organization, key features and implications in order to relate them with the case studies (Villa 31 and 31bis and Villa 21-24 NHT Zavaleta from Buenos Aires city) further in this investigation namely through a literature review and an analysis of spatial images and theories associated to the topic.

### 2.2 State of art of Slums

The recent academic literature about slums in Latin America is focused on the poor life conditions and the social discrimination the inhabitants are living and suffering. According to UN-Habitat (2012) in the past few decades a notable surge has occurred in economic growth, but it has been accompanied by an equally daunting degree of inequity under various forms, with wider income gaps and deepening poverty in many cities around the

world. Inequality has increased in most of the developing countries over time, reaching extremes in Argentina, Brazil and South Africa (UN-HABITAT, 2012/2013). Rodgers et al (2012) explain the situation of Latin American cities in which they consider as fundamentally fragmented spaces instead of unitary systems in which the majority of the population now resides. The vernacular term of slums in Latin America depends on each country: favelas (Brazil), *barriadas* (Peru), *barrios bajos* (Mexico), and *villas miserias* (Argentina) are some examples (Rodgers et al, 2012). It is also important to highlight that the term ‘informal settlement’ is used as a synonym of slum in Latin America (sharing some characteristics).

#### Fact Box

**Slum:** settlements with the most deplorable living and environmental conditions, non-complying with construction directives and standards, with inadequate basic services provision and insecure land tenure status (UN-Habitat, 2003).

**Informal settlement:** illegal settlements occupying land without title or right (UN-Habitat, 2003).

Table 2.1. Fact Box. Source: Author, 2015

Despite the different names and countries, they all feature the most deplorable living and environmental conditions. The common deprivations that affect the daily existence from the inhabitants of slums are characterized by limited access to income and employment; inappropriate water supply, precarious sanitation, overcrowded and improper housing, risky locations, spatial issues (e.g. narrow corridors instead of streets, lack of open spaces) which inhibit mobility and transport, insecurity of tenure and vulnerability to serious health problems. They are also known for their atmosphere of fear, social and economic exclusion of their inhabitants. The dwellers are often stigmatized and discriminated because of their location and in terms of social conditions and access to public and social services. In Latin America and the Caribbean, the average slum predominance is 24 % (UN-HABITAT, 2012/2013).

Cities, especially from developing countries are characterized by a fragmented and unequal society in which people from slums’ right to the city have being denied.<sup>1</sup> Thus, informality plays a significant part not only in showing the miseries of a specific social model but also influencing their change (Ramírez, 2012). Furthermore the actions to improve the livelihood will largely depend on the development’s level of the relevant country or city. In developing countries’ most poor cities, proper life conditions are strongly associated with the provision of public goods such as water, sanitation and electricity, and improvements in slum neighborhoods (UN-HABITAT, 2012/2013). Rodgers et al (2012) argue that sometimes, slums are seeing as drivers of progress, while at other times are seen as an obstacle.

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<sup>1</sup> This is elaborated in section 2.6

Economically speaking, slums went from being initially a reserve of labour to zones of exclusion and desertion. Politically, they shifted from being considered minimal and uninterested into sources of possible shared action and the reactive policy initiatives fail to take into account the unity of the cities considering just one side of the issue. Socially, slums are seen to have evolved from integrating demographic melting pots to nests of crime and violence that threaten the security of the rest of the city (Rodgers et al, 2012).

Moreover, in a theoretical way Jáuregui (2012) borrows the notion of 'smooth' and 'striated' space from Deleuze and Guattari (1994) to explain the difference between the formal and the informal city in Latin America. The 'striated' space (formal) could be linked with static or less dynamic constructions while the smooth space (informal- slums) is derived from individual actions that favor unpredictable relations. Thus, the author of this research finds connections between this 'smooth' space and self-organized processes since both develop unexpectedly as results of individual actions.

### 2.3 State of art of Self-organization regarding slums

The following literature review entails the discussion around the process of self-organization as an opportunity to reshape the urban fabric. First of all it is important to acknowledge that the term informal refers at something that it is just extra-legal, outside of the regulatory framework but not criminal (Brillembourg and Kulmpner, 2012). As self-reproducing systems, slums introduce another dimension to the complexity that characterized the cities and the way people understand this complexity will affect their transformation and growth. This adds further impetus to the need for a proper appreciation of how slums work functionally and formally (Mills, 2012). Hence, if a person looks at the informal city from a certain distance, that one would see sprawling, searching in vain for order with a clear beginning and end; but close up, different patterns begin to emerge and a sort of logic can be discerned (Brillembourg and Kulmpner, 2012).

Mills (2012) states that while there was no centralized concept to guide the development process of a city from the top down, there is a network of design-build efforts based on simple rules that take into account the context, such as site conditions, local knowledge, topography, the availability of tools and materials, technical skills and climate. Thus, a key factor about slums is the affordable and sociable way of making cities. They are constantly emerging through a process of dynamism and flexibility in which the decisions are taken according to a need or and opportunity in a series of adaptations (Mills, 2012). In addition, Boonstra and Boelens (2011) expose that self-organization is not focused on predetermined ambitions, such as the democratic promise of empowerment or political renewal, rather it is a process that happens or not. Thus, when it happens, it represents the needs and urgency for translating existing place characteristics, institutions and mutual activities directly from society itself. Boonstra and Boelens (2011)

also argue that self-organization could contribute to the spatial, economic, social and political objectives of citizen involvement. They argue that by recognizing self-organization, planning will open up to the society with all the multiplicity and pluralism from it.

Moreover, slums are constantly changing and growing as the outcomes of processes that drive cities to fragmented pieces, which can be verified across scales. Nevertheless slums could be seen as an alternative solution regarding housing deficit since they play a key role within a city's system in which the parts do explain the whole, but only when seen in the light of a self-organized process (Barros and Sobeira, 2002). Lastly, Bolliger et al (2003) explain that self-organization is a universal phenomenon that occurs across a broad range of disciplines; it may serve as a perspective to understand the ecosystem complexity and function in a more general framework.

## 2.4 Self-Organization

'Any community consists of a wide variety of geographic, social, political, economic and cultural patterns which both act and interact to form the nature and condition of society. The relationship between these various patterns is constantly changing, giving rise to new and different conditions, some beneficial to the community, some deleterious...' (Ratcliffe, 1974, p. 104 cited in Allmendinger, 2009). Thus, the combination of (very) different patterns influences this web of interrelations and makes it complex. This type of web or system, highly complex is characterized by:

1. Many independent agents interacting with each other in many ways,
2. Adaptation,
3. Dynamism,
4. Spontaneous self-organization. (Waldrop, 1992, p.11 cited in Allmendinger, 2009).

Self-organization indicates the ability of a sort of systems to change their internal function or structure regarding internal and external circumstances. Thus, the elements of self-organized systems can manipulate themselves or other elements in order to adapt the whole system against external variations (Banzhaf, 2009). One prominent example of a self-organized system is a city, which in part grows gradually from the bottom up. Cities are in flux as people and their activities respond constantly to changed circumstances that involve variations in movement patterns, locations, and the use of buildings and in social preferences (Batty, 2012). Furthermore it is argued that universal and self-organizing systems derive from stable and instable principles. On the one hand, stable systems are those in which small changes in the initial conditions have lesser effects. On the other hand, in an unstable system, small changes in the initial conditions will necessarily diverge exponentially over time. People must think in terms of probability rather than certainty (Prigogine, 1996; p. 27 cited in De Roo, 2003)

### Fact Box: Key aspects of Self-organization

According to De Roo (2010) self-organization processes result from complex contexts (many elements involved) in which all their elements are interconnected and interacting constantly. (e.g.: a villa, their inhabitants, the government, the formal city, society, etc.). These types of systems are open to any change and flux of information exchanging with other systems and the environment. A consequence of this constant exchange and interaction is the development of other structures (De Roo, 2010). They emerge and develop in a spontaneous way adapting absolutely well to their changing environment. At the same time, these systems are robust functioning and structured entities. They are flexible within their environment and resilient at the same time. They are one of the characteristics of non-linearity (De Roo, 2010).

Table 2.2. Fact Box. Source: Author, 2015



**Figure 2.1:** There are many examples in which people may not realize self-organization patterns; for example the creation of structures made by Bees. Source: <http://www.sciencedaily.com/releases/2009/01/090128211438.htm>



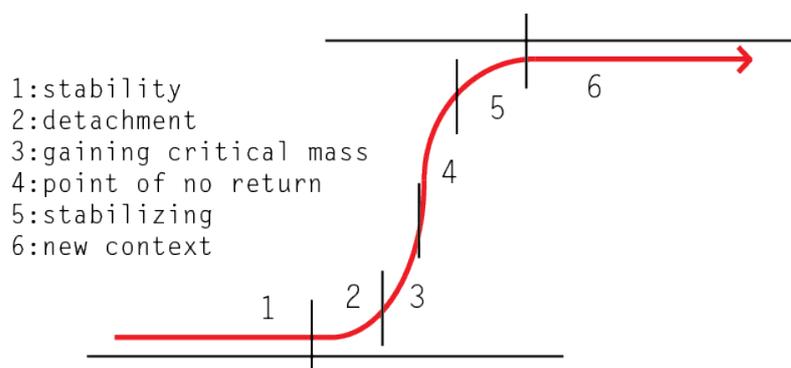
**Figure 2.2:** Elephant path is one example of self-organization patterns in society. Source: <http://www.eltono.com/es/projects/promenade-es/promenade-no6/>

## 2.5 Transitions

Transition is a set of changes reinforcing each other but taking place in numerous areas, such as technology, economy, institutions, culture, ecology and society. It can be seen as a spiral that strengthens itself; represents multiple causality that are caused by independent developments in periods of slow and fast development. This concept can be used at diverse aggregation levels, such as corporations, areas, countries and regions. Hence, it is useful to study the developments (e.g. villas' development) because they can be followed over time and compared to each other (Rotmans et al 2001). Therefore, a transition transforms the structural character of a place from being at first a vacant land to become a poor neighborhood through different periods (an informal settlement). It is not uniform as the process is not deterministic: there are big differences in the scale of variation and the period over which it occurs including a variety of possible development routes, whose direction, scale and speed government policy can influence, but never entirely control (Rotmans et al 2001).

From a system's perspective, this transformation can be seen from slow

dynamics to rapid development and instability returning to relative stability turning the new equilibrium dynamic (see figure 2.3). Hence the transition that villas have gone through have different stages. The first one does not suffer large changes being in equilibrium since at the beginning there were only vacant lands of the city owned by the state. Then, change occurs when it shifts at a take-off stage because people started to occupy those lands as a result of different events (economic crisis, population growth, immigration). Later, the accretion of change arises resulting in structural alterations under a tipping point and an acceleration stage that can be seen by numerous conflicts between the inhabitants and the municipality, the regulatory framework, high levels of poverty, the need of people to house their family and the consequent a rapid (poor) urbanization. After that the speed of the change decreases and a new dynamic equilibrium reaches a stabilization stage. The villa is establishing as a part of the city; their inhabitants overcome the differences with the municipality through (informal) agreements and they are creating a community character (based on Rotmans et al, 2001).



**Figure 2.3:** Transitions model. Source: Adapted from De Roo, 2014.

A transition has three dimensions:

- The speed of change;
- The size of change;
- The time period of change (Rotmans et al, 2001).

It is important to recognize these three dimensions in villas and its relations with the phases of their transformation in order to understand their development and draw conclusions for the research questions. Therefore, the first dimension, the speed of change can be reflected within the slums' population growth and the rapid occupation and urbanization they went through. The size of change can be related to the high amount of slums within the city (that it is also increasing), the extension of each one of them and the increasing scarcity of space. Consequently, the fragmentation that cities have suffered and also, and the social impacts caused in citizens raising differences between people (discrimination, fear, etc.). The time period of change in relation to the years the development of those villas took; some of

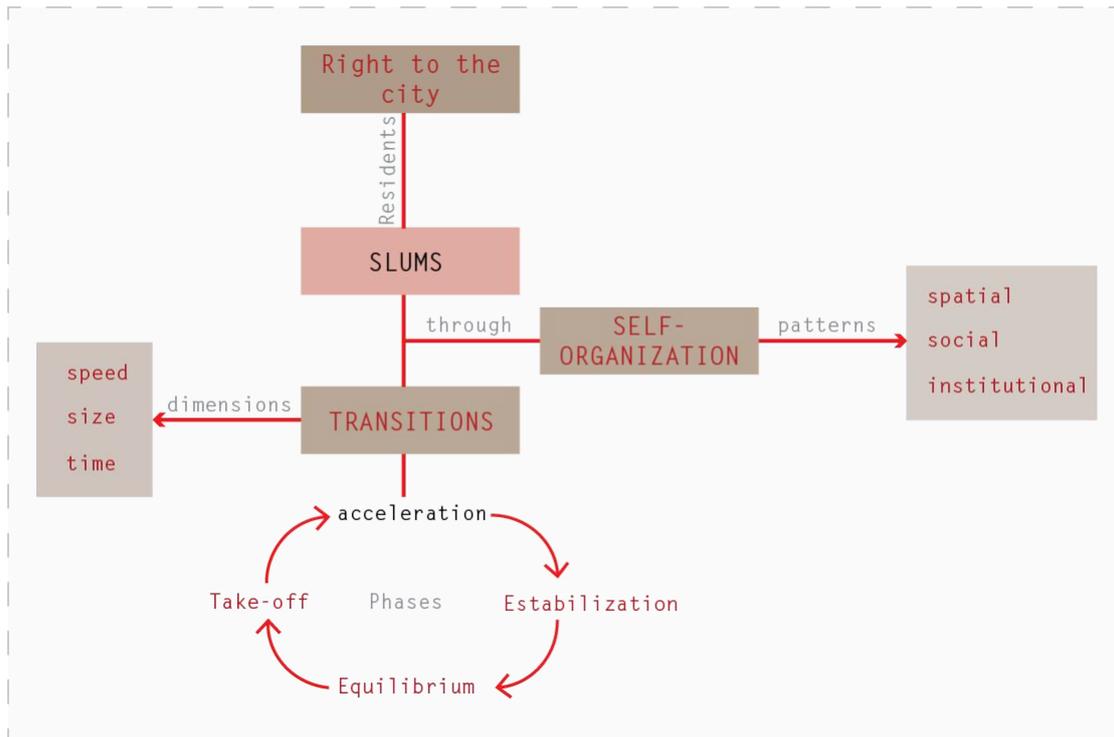
them have shown a fast expansion in a lapse of ten years whilst others have presented a slow development of more than 70 years. This analysis will be address again but in relation to the case studies in chapter five.

## 2.6 Right to the City

Every city and urban area around the world is experiencing a building boom that is simultaneously generating a world of slums since the quality of urban life has become a commodity for people with money (Harvey, 2008). According to Harvey (2008) this urbanization process has played a critical part in the absorption of capital surpluses at all scales producing the dispossession of the urban poor of any right to the city. This right means the right to inhabit the city, the right to make urban life on new terms (unrestricted by the demands of exchange value), and the right of residents to continue unalienated from urban life (Attoh, 2011). Moreover, the right to the city is, in many cases, a socio- economic right, a housing right, a transportation right, and the right to enjoy and make use of natural resources (Attoh, 2011). Furthermore Harvey (2008) explains that the cities in the developing world are fragmented into different sections. On the one hand there are the wealthy neighborhoods that are provided with all types of services; on the other hand there are the poor neighborhoods without proper services and infrastructure. Each of these sections seems to live and function in an autonomous way. In addition Attoh (2011) states that urban policies and urban design are increasingly realized in undemocratic forms, which ignore the poor and generate cities that prioritize the needs of a few over the society as a whole. Therefore, as Alarcon (2014) has explained the right to the city for the slums' residents is one that is forced to fight many institutional and cultural obstacles. Hence, it makes sense to address the 'right to the city' debate within this research since as it was already stated the residents of slums' rights have been denied and in order to overcome the obstacles and impose their rights, they had to come up with their own initiatives through self-organized actions according to their context, needs and adapting to different situations.

## 2.7 Conceptual Model

The following conceptual model organizes and frames the concepts that were analyzed previously in order to summarize the main idea of this thesis. It shows the linkages of the different elements of theory within slums that leads the course of this investigation.



**Figure 2.4:** Conceptual model. Source: Author, 2015.

## 2.7 Conclusion

‘Since self-organization is a very universal phenomenon that occurs across a broad range of disciplines, it may serve as a tool to address the understanding of ecosystem complexity and function in a more general framework’ (Bolliger et al, p. 551, 2003). Thus, the aim is to make use of it in order to support the study of villas. Hence, this chapter starts with an overview of self-organization regarding slums and the state of art of slums. Secondly, the concept of self-organization has been addressed in more detail and it has been related to villas and its development. In addition, villas’ development processes have been linked with transitions in order to explain the gradual course of transformation they have experienced. As a conclusion, it is worth to say that villas are constantly adapting as a response to different contextual situations (economic crisis, immigration, poverty, etc.) in persistent interaction within internal and external components (government, society, regulations, neighbors, etc.). Their developments transits many phases and have diverse dimensions and thus, as a logical consequence, new social and spatial patterns have emerged within the Buenos Aires Autonomous City.

## CHAPTER THREE: Methodology

### 3.1 Research methodology.

This research aims to analyze how are the villas of CABA organized/ self-organized, if they have experienced a transition process throughout the years and the driving forces of the villas' growth. Moreover, identify what is important to consider for upgrading programs and how the concept can be used to explain the expansion of a slum. Hence a qualitative approach is needed since there is a need to understand context-specific processes that these villas are experiencing. Therefore, the methodology used for this investigation is that of case study, which is explained in this chapter. This chapter acts as a link between the first half of the thesis (research questions, theory) within the second half (focused on data analysis and findings).

### 3.2 Case Study research.

A case study involves a complete and exhaustive study of a particular case, its complexity and nature (Bryman, 2012). The word 'case' commonly connects the case study with a location like a group or an association emphasizing an intensive investigation of the situation (Bryman, 2012). Hence in order to answer the research questions of this study presented in chapter one and following the case study approach, two slums from CABA were selected. The author considers this research strategy appropriate for this study since according to Yin (1994) it helps to retain the holistic and meaningful characteristics of real-life events (for example the growth of a neighborhood). The use of case studies in many situations contributes to obtain knowledge of individual, group, organizational, social, political and related phenomena. The distinguishing need for this methodology results from the aspiration to understand complex social phenomena (Yin, 1994). Thus, the following villas of CABA have been chosen:

Case study/ Villa	Location	Stage of formation
1.Villa 31 and 31bis	East side of CABA	Consolidated/83 years
2.Villa 21-24 NHT Zavaleta	South of CABA	Consolidated/70-75 years

**Table 3.1:** Selected case studies. Source: Author, 2015

#### Case selection procedure

This selection was made in order to conduct a spatial and comparative analysis that helped to give structure to the discussion and findings. The following criteria were used in order to select the cases.

**Slums' Formation.** The formation of both villas was taken into account within the process selection since Villa 31 and 31bis has been planned as an immigrant's neighborhood while Villa 21-24 NHT Zavaleta has emerged

spontaneously.

**Slums' growth.** These two cases, Villa 31 y 31bis and Villa 21-24 NHT Zavaleta have been selected because both are among the biggest villas of the city and both have managed to grow on their own without any plans involved housing more than 40000 people each. This autonomous growth was a crucial aspect for their selection.

**Slums' age.** The two villas are also amongst the oldest of the city, with more than 70 years each (first case, 83 years; second case 70/75 years). Therefore they have managed to maintain throughout the years facing different events and with a weak government's involvement.

**Growth patterns.** Both cases have shown a horizontal expansion but Villa 31 y 31bis has also experienced a vertical development with houses of more than five floors rarely seen in Argentinian slums. Furthermore both have experienced an increasingly fast development from the year 2000 onwards.

**State/ Location of slums.** The cases are consolidated within the urban fabric of the CABA as permanent neighborhoods despite their inadequate infrastructure and housing conditions. Moreover, Villa 31 y 31bis is placed in a good location (near the city center and former empty land owned by the state) whilst Villa 21-24 NHT Zavaleta is located in a low quality site near the Riachuelo River (highly polluted and vulnerable to floods).

**Initial conditions.** Both cases have presented several changes in relation to their initial conditions: from immigrants' neighborhood and empty land to become huge slums.

### 3.3 Comparative case study and spatial analysis

The analysis and interpretation of the collected data was made in order to answer the research questions. The method used for this investigation was a combination of a comparative analysis and spatial analysis. The case studies were analyzed through different patterns that influenced the villas' organization/ self-organization. Those patterns are: institutional/ policies, socio-economic and environmental. Then both cases were compared in relation to those patterns in order to understand how the development of the villas occurred over time and hence to structure the discussion and to build the answers for the research questions. Furthermore, the spatial analysis played a pivotal role, as the guiding layer that led this investigation. It was conducted through the study of different time period maps which served as a very useful tool to address the growth and changes of those villas. For instance, it was possible to identify the changing boundaries of the cases over time, their expansion, the villas' fabric density, the empty land which the residents use for social activities, etc. Moreover it helped to explain the

impacts of those changes and the linkages within the other patterns (institutional, socio-economic, and environmental) and the impacts those changes have provoked leading to the answer of research questions. Regarding the time periods for the analysis, they were established according to the available data. There are no maps from 1930 until the year 2000 from those areas of the city. Moreover, the events that occurred in this first period (which is the longest) have not provoke fundamental changes within the slums' fabric. Therefore, the first time period (1930-2000) has been analyzed using old photos, academic articles, documents and journals. After the year 2000, both cases have shown incredible growth, which has called the attention of many academics, students and also the local media. Moreover, technology has played a crucial part regarding in the ease of obtaining satellite images from the Internet. Thus, it was possible to find maps and pictures of those areas from 2000 onwards in many university websites and journals. From the year 2000 the time periods were selected in relation to different events the country has faced and the incredible growth the villas have shown in shorter stages. The economic crisis the country suffered in 2001 fostered severe impacts within all aspects. After that, Argentina experienced a recovery period in which the villas began to grow in extension. From the year 2009-2010 the villa 31 y 31bis is experiencing a different growth pattern namely through its vertical development.

### 3.4 Data collection and Analysis.

In order to conduct this investigation the author used maps of both villas categorized in different time periods from the year 2000 until recent times. From these maps, it was possible to collect important data related to the villas' expansion and changes within the urban fabric. These maps are images taken from Google Earth and pictures throughout this last 85 years. The maps analysis and comparison was a useful tool in order to obtain relevant information of the villas' extension, their growth and changes in relation to the fabric, identify empty occupied and empty land, etc. Moreover, as no satellite maps were found from the villas' first decades, secondary sources were also used to collected relevant data of the villas' development such as governmental reports and documents, urban and planning policies, upgrading programs, national censuses (very useful to analyze the population growth in relation to the expansion and density of the villas) and existing academic literature related to slums and informality, etc. In addition, local media articles and news were also included which helped to gather data related to villas' current conditions, social and political issues, villas residents' movements, housing deficit, etc. This information helped to analyze both case studies from different perspectives and build linkages within the theory.

## CHAPTER FOUR: Background of Slums in Buenos Aires Autonomous City and Planning System in Argentina.

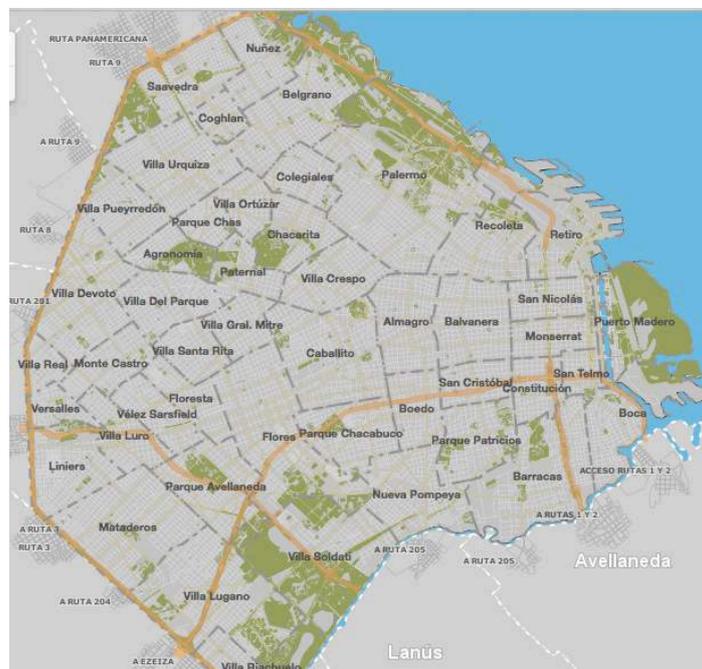
### 4.1 Introduction

The Ciudad Autónoma of Buenos Aires (CABA- Buenos Aires Autonomous City) is the capital of Argentina. It is located at the east-center of the country (see figure 4.1). According to the National Institute of Statistics and Censuses (INDEC, 2010) the city has a population of 2,890,151 inhabitants and the Metropolitan Area of 14,391,538 people conforming one of the biggest in the world. Buenos Aires is divided into 48 barrios (neighborhoods) (see fig. 4.2) clustered in 15 comunas (communes). Each comuna includes one or more neighborhoods that are represented in the respective community centers for administrative reasons. These centers have their own budget; being governed by a community board formed by seven members whose government period is for four years. One of the biggest and worrying problems from CABA is the co-existence of these formal neighborhoods and the ‘villas miserias’ (slums) spread within the urban traffic.

Buenos Aires Autonomous City’s (CABA) urban fabric changes have been influenced not only by the action of the government and public investments, private companies and planners, but also by the emergence of informal patterns developed in the form of slums or villas. According to the INDEC (2010) there are 20 villas in the CABA.



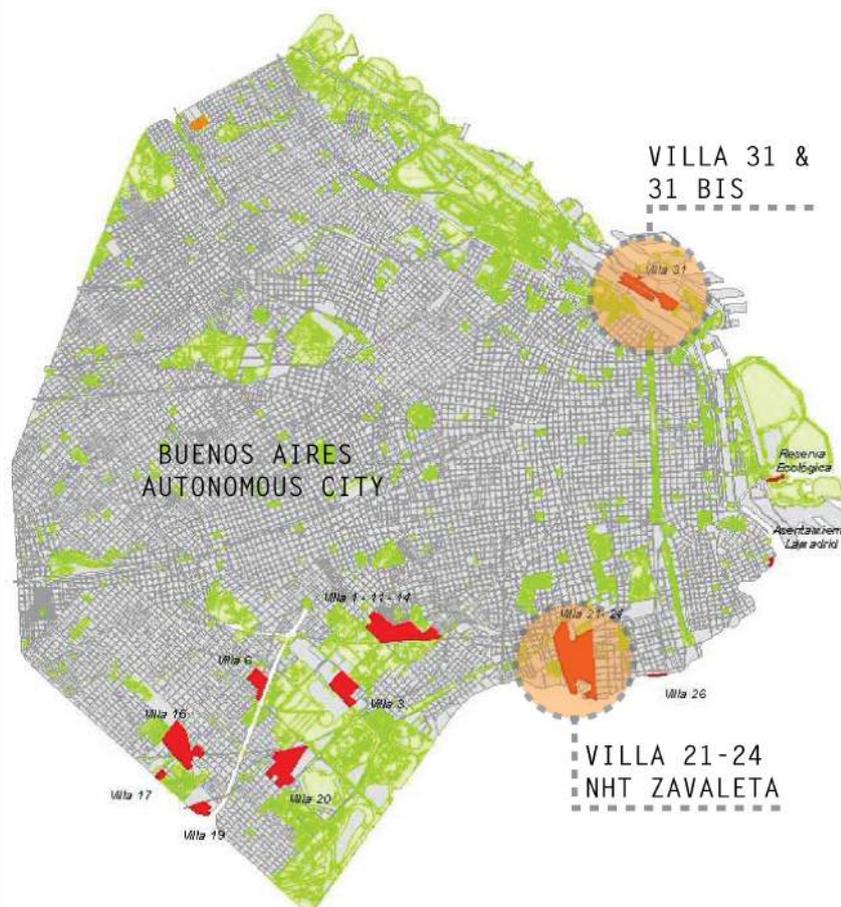
**Figure 4.1:** Location of Buenos Aires Province and City. Source: Author adapted from <http://commons.wikimedia.org/wiki/User:NordNordWest>



**Figure 4.2:** Buenos Aires Autonomous City’s 48 neighborhoods. Source: Government of the City of Buenos Aires. <http://www.buenosaires.gob.ar/>

The villa 31 appeared in the 1930s in the neighborhood of Retiro (see figure 4.3). It is in a strategic location of the CABA since it is near the most expensive neighborhoods, financial district and next to the main bus and train station of the country. Thus, because of its setting characteristics it is a very disputed place for infrastructure projects and investments from private and public actors. The settlement presents serious problems in the provision of public services such as electricity, water and housing. The City Government announced plans for resettlement and eradication of the villa creating uncertainty among the residents. Nevertheless none of these plans were implemented until this current year (2015). The '31bis' was added to the name (Villa 31) referring to the extension the settlement experienced trespassing the other side of Arturo Illia highway (main access to the city center).

The villa 21-24 NHT Zavaleta is located in the neighborhood of Barracas in the southern part of the city (see figure 4.3). The slums' limits are the river Riachuelo and the railroad tracks of Belgrano Sur. It is the biggest villa of the CABA with a population of 33245 people (INDEC, 2010). It emerged during the 1940s and was also subject to eradication by the last military government. As the villa 31 and 31bis, it lacks of proper housing and public services.



**Figure 4.3:** Location of Villas in Buenos Aires City. Source: <http://www.moqlik.com/i/show/4497/Mapa-de-villas-de-la->

## 4.2 Slums formation and characteristics.

In Latin American cities, the rapid growth of slums was an outcome of the urbanization process from the 50s onwards. The high plot prices, rental and poverty, lack of urban planning and weakness of political and social actions were the factors that contributed their formation (Almansi, 2009). Slums are considered to be an indicator of a malfunctioning housing sector earmarked by a difference between high housing prices and income ratios, inadequacy of infrastructure, distorted and unclear land, housing, and real estate markets. Consequently slums are an example of the governmental incapacity to predict, articulate, and implement proper property and housing policies (Acioly, 2007).

Buenos Aires received more than 40000 immigrants from other provinces from the northwest between the 40s and the 70s. They settled in 'loteo popular' (popular lots): inadequately prepared lots on the peripheries of the city in which later they built their own houses. The actions of the new inhabitants fostered the development of these lots but the political and economic problems that Argentina has been going through since the 70s has obstructed this system leaving the outskirts without proper amenities (Thuillier, 2005). During the 90s, the regressive nature of income distribution was emphasized in Argentina. According to the INDEC, in October 1999 the richest 10% of the population earned 24 times the income earned by the poorest 10% in Buenos Aires and Buenos Aires Metropolitan Area. Three years later, due to the economic crisis the INDEC announced that the inequality grew to a difference of 28 times between high and low class (Arenas, 2002). This last socio-economic crisis from 2001 has left a poverty rate of around 30% (Thuillier, 2005) and one consequence was the emergence of new and extension of existent villas such as the 31bis.

The case of Argentinian cities could be described as a spontaneous urbanization in land sub-divisions and an insignificant provision of services and infrastructure promoted by private developers and planned for low-income clusters that would paid them in monthly fees. As a consequence the spatial and social organization of Argentinian cities has occurred through this model and thus has led their physical development resulting in low densities of no more than 20-30 tenants per hectare. Hence, the provision of services and infrastructure was expensive for this kind of settlement pattern (Almansi, 2009) leading the population to a situation in which they started to look for alternative solutions on their own. Slums in Argentina encompass two types of land occupation: 'villas miseria' and settlements on informal sub-division (see table 4.1). Both had originated in different historic periods. The appearance of the villas corresponds to the industrialization process the country went through in 1940. The number and size has increased during the following decades due to the migration flows. Moreover, the settlements

on informal sub-divisions developed within the military government (1976-1983) as a consequence of the annihilation of the productive structure and the elimination of slums. The settlements were located mainly on the outskirts of the cities and continued growing after the recovery of the democracy because the economic and social conditions of low-income sectors remained the same (Almansi, 2009).

Characteristics	Villas	Settlements on informal sub-division
Occupation	Irregular occupation, commonly on public owned land;	Irregular occupation, mainly on private and regular land;
Organization	Responds to the sum of individual and unplanned occupations; self-organization	Collective organization;
Housing	Houses have different degrees of precariousness;	Houses have evolved from precarious to firm constructions, depending on the characteristics of the inhabitants' capacity and resources;
Population	High population density;	Low population density;
Location	Located in good sites of empty urban land regarding points of production and commerce;	Low quality of the land (often subject to flooding) with statutory restrictions (e.g. garbage dumps, waste land or flood plains);
Land situation	Lack of urban planning;	Urban planning applied (cadaster, data verification, streets design and public spaces);
Social groups	The inhabitants are unskilled or informal workers, they show the heterogeneity of poverty, housing 'old' villeros, new migrants (from provinces and neighboring countries) and impoverished sectors;	These inhabitants were previously 'urbanized' because they passed earlier by other forms of urban habitat as villas for example;

Perception of neighborhoods	First, the inhabitants considered the villas as transition habitats towards a 'possible' social promotion, but expectations failed for most of them;	The inhabitants perceived the settlements not as a transitory resolution, but as an improvement of their condition in the future;
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**Table 4.1:** Differences between Villas and Settlements in informal sub-divisions. Source: Adapted from Almansi 2009, Cravino 2008.

### 4.3 Land tenure and planning system in Argentina.

Argentina is organized in three governmental levels (national, provincial and local) with a considerable gap between them and limited land and planning policies. Moreover the land was always seen as a source for wealth expansion characterizing the regulations as fragmented (each province has its own regulations) and selective for wealthy people. Hence, this situation has prevented the elaboration of a national land regulation framework for the society (Almansi, 2009). Regulations and land use planning are weak at provincial and local levels (it is a centralized system). Furthermore, the provincial laws are dispersed (each province has their own regulations) and outdated regarding the land regulation and sub-division because of political discontinuity. In Buenos Aires, due to the fast development of the city and the propagation of illegal plots, numerous decrees and laws were sanctioned between 1949 and 1957 for the regulation of these plots in low-density areas, stating minimum dimensions for them, and establishing compulsory registration of preparatory sales contracts (Almansi, 2009).

Notwithstanding these regulations, Almansi (2009) states that new illegal plots were conformed without any state controls, especially in flooding areas. The laws launched in 1957 restricted the level of houses to be built regarding the flood elevation. This was mandatory in order to acquire the building permit. As a consequence, the costs of lands increased affecting the lower-income people and their access to 'loteo popular' (popular plots). As Almansi (2009) explains the regulations at the local level are heterogeneous approaches that have to deal with the limitations enacted by provincial laws. The classification of local plans is made in four groups:

- Strategic development plans (social, economic, spatial, environmental approaches);
- Urban plans (physical, spatial, environmental aspects);
- Statutory instruments (regulations, occupation, sub-division and facilities);
- Major urban projects (upgrading, renovating, relocating and constructing plots, infrastructure and neighborhoods) (Almansi, 2009).

#### 4.4 Existing housing and slums policies. Neighborhood Improvement Program (PROMEBA).

Traditionally in Argentina the land tenure and upgrading programs have had a narrow scope focusing only in the provision of basic infrastructure for a few slums. In addition these programs were often limited by bureaucratic restraints imposed by administrative processes (Almansi, 2009). Since Favela-Bairro (an upgrading Brazilian program) was launched in 1995 at least six other countries from the region have adopted similar initiatives. This was the case of the Programa de Mejoramiento de Barrios (PROMEBA) (Brakarz and Aduan, 2004). For the implementation all three governmental levels were involved and responsible (national, provincial and local) with loans from the Inter-American Development Bank. It focuses on villas and peri-urban settlements. The program has not been implemented in none of the two case studies, which will be described in the following chapter.

Neighborhoods Improvement Program (PROMEBA) aims to improve the quality of life and contribute to the inclusion and integration of Argentine households from the poorest segments of the population within the society and the formal city. The execution of comprehensive neighborhood projects aim to consolidate the target population in the place they live, providing access to land ownership, contributing to the provision of urban infrastructure, community facilities and environmental sanitation, and promote the strengthening of their human and social capital (PROMEBA, 2011). The program is oriented towards poor social sectors that have unfulfilled basic needs with low-income levels and improper living conditions. The subsidies are for basic technical and social infrastructure (water, gas, electricity, drains, schools, health centers, sport centers, etc.).

The program works on a decentralized base through provincial and municipal units. The national level unit is in charge of the management of projects' funds, plans and monitoring. The supervision of implementing units through different phases of the project and the evaluation of management capabilities is another task of it. Lastly, it develops capacity- building actions through education programs. At the provincial and local level the task is to formulate and implement the projects. They also manage bidding processes, contract and examine the works, as the retaining, instruction and controlling the field groups. The introduction of stakeholders is wide ranging from settlers organizations, state bodies, construction companies, professional associations and social organizations (Almansi, 2009). PROMEBA pursue to encourage social organization processes and community development introducing the participation of villas' population in the design and selection of works (PROMEBA, 2011). It also seeks to integrate and link the villas within the city, its infrastructure and society. Therefore, land tenure regularization is an essential element of each project because its eligibility depends on certain physical and environmental conditions, but mostly on the type of population and the possibilities of regularization for that area within

the project implementation period. However since land tenure regularization has been stated as the legal ownership of the plot for a latter delivery of the property title to each family, many people are excluded from the eligibility process due to numerous difficulties over the last ten years such as legal struggles for occupant families, houses illegally taken by force that delay the titling procedure in short or medium time (Almansi, 2009).

#### 4.5 Conclusion.

This chapter has focused on the geographical, institutional, economic and social context of villas. It has also addressed two types of land occupation in order to understand the characteristics of the slums. Nowadays, 20 villas exist in the CABA in which poverty, corruption, insecurity, lack of proper housing, inadequately infrastructure, scarcity of services and education are the main features of these neighborhoods. Moreover, the Argentinian regulatory framework is fragmented due to different legislations each province has. In addition, the upgrading program had to deal with many stakeholders and different strategies at local levels turning the process complex and confusing. Institutional weakness, lack of long-term plans and state policies; economic crisis; absence of urban structure and government inefficiency are some of the aspects that fostered the occupation of villas from the large migration flow to Buenos Aires without any formal institutional framework. Currently, the situation still remains and the slums are continuously expanding and changing the urban fabric. Therefore two case studies (Villa 31 and 31bis and 21-24 NHT Zavaleta) will be analyzed in depth in the next chapter in order to identify how is the organization or self-organization of those slums.

## CHAPTER FIVE: Case Study Analysis.

### 5.1 Introduction.

This research examines two case studies of 'Villas' from The CABA: Villa 31 and 31bis and Villa 21-24 NHT Zavaleta. The two Villas have formed and grown through spontaneous actions from their residents. The Villa 31 and 31bis is one of the oldest slums of the city (83 years) presenting a consolidated state through the years and located in an strategic place (next to the city's central station), whilst the latter case is the biggest slum located at the south of city. The different types of slums differ in their geographical location: the ones that have been established in both Buenos Aires Autonomous city (CABA) and Buenos Aires Province are generally in empty urban land with good conditions, whilst the types of slums that establish in low quality property constitute a phenomenon that has happened mostly in CABA. Therefore, CABA presents both types: villas in good sites (empty land) such as Villa 31 y 31bis and villas in low quality sites (dumps, risky locations, floodable land) such as Villa 21-24 NHT Zavaleta. This distinction is crucial to understand the nature of informality and its causes and, therefore, to determine the type of policies needed to be implemented.

### 5.2 Villa 31 and 31bis.

The origin of the villas has always been linked to the processes of rural-urban migration triggered from the 1920s onwards by the breakdown of regional rural economies and the industrialization processes in the main urban centers (Cravino et al 2008). Slums are the result of land seizures that occurred in the last years of the dictatorship, the popular response to the disappearance of other alternative means of access to urban land sectors (Di Virgilio et al, 2010). The highest densities for all the neighborhoods of Buenos Aires Metropolitan Area (AMBA) are seen in the CABA and the municipalities of the northern corridor, where more than 250 people live on average per hectare (Cravino et al, 2008). CABA is Argentina's core industrial, commercial, political and cultural center and seat of the federal government. It has three million inhabitants that together with AMBA represent more than a third of the population. In recent years, new social problems have become crucial in the area of the city, especially safety, drug addictions, environmental pollution, the exercise of citizenship rights, children living in the streets, etc. (Arenas, 2002). The Villa 31 and 31bis is a particular case as to other conflicts and conflicting opinions about their treatment mainly because of its strategic location in a high property value area, where the square meter is overvalued (USD 6000) due to economic growth in recent times. It is the oldest slum of the city originated in the 1930s. The Federal Government own all lands occupied by the settlers (Abos 2011; Arenas, 2002).

#### Development of the Villa

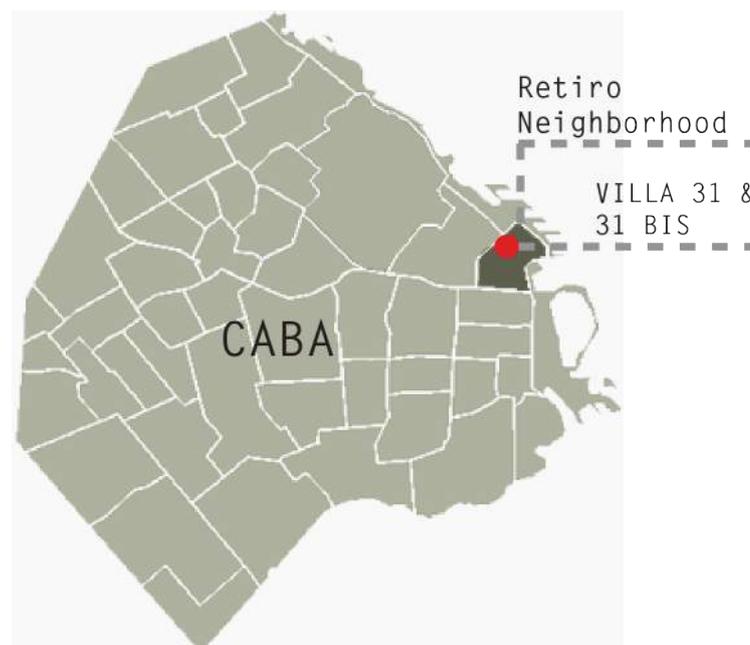
## Policies and Institutional conditions

The villa has started to be built in the 1930s. In the beginning it was a small and basic neighborhood mainly for Italian immigrants (see figure 5.1, 5.2) built by the Argentinian Government. Most of the inhabitants were blue-collar laborers, working for the railways and in the port (Jauregui, 2004). Its original name was ‘Villa Esperanza’ (Hope’s Villa).



**Figure: 5.1-5.2** Retiro Neighborhood in the 1930s and vacant land for future governmental projects.  
Source: [http://es.wikipedia.org/wiki/Villa\\_31#/media/File:Retiro\\_y\\_Torre\\_de\\_los\\_Ingleses.jpg](http://es.wikipedia.org/wiki/Villa_31#/media/File:Retiro_y_Torre_de_los_Ingleses.jpg)

This area is currently known as ‘Barrio Immigrantes’ (Immigrants Neighborhood), which together with the ‘YPF’, ‘Guemes’, ‘Comunicaciones’, ‘Autopista’, ‘Block 34’, ‘Cristo Obrero’, Ferroviario and ‘El Playón’ neighborhood (see figure 5.3) integrate the Villa 31 (Acosta et al, 2011). The Villa is located in Retiro neighborhood at the middle east of the city (see figure 5.4). It has faced eviction by the last military government from the 1970s and then it gained interest from the 90 because it is a place disputed for infrastructure projects and real estate investments (Cravino et al, 2008) since its proximity with the financial district, the commercial center and the railways makes the area very attractive for different stakeholders (the government, private parties, developers, NGOs, citizens, etc.).



**Figure 5.3:** Location of Retiro Neighborhood at the east side of Buenos Aires Autonomous City.  
Source: Author Adapted from [http://commons.wikimedia.org/wiki/File:Retiro-Buenos\\_Aires\\_map.png](http://commons.wikimedia.org/wiki/File:Retiro-Buenos_Aires_map.png)



**Figure 5.4:** The different neighborhoods of the Villa 31. 1 ‘Inmigrantes’, 2 ‘Guemes’, 3 ‘YPF’, 4 ‘Comunicaciones’, 5 ‘Cristo Obrero’, 6 ‘Ferroviario’, 7 ‘Playon este’, 8 ‘Bajo Autopista’, 9 ‘Playon Oeste’.  
 Source: Author Adapted from  
[http://www.politicaymedios.com.ar/uploads/noticias/20150325103545\\_mapa\\_villa\\_31.jpg](http://www.politicaymedios.com.ar/uploads/noticias/20150325103545_mapa_villa_31.jpg)

In 1955, many villas were established as permanent housing instead of temporary (fig. 5.5, 5.6). Consequently, the government promoted an eradication plan, which did not take into account the history, culture and identity from the inhabitants, nor the various social ties that the families had established for several years (Acosta et al, 2011). In contraposition, the Neighborhood and Slums Federation (Federación de Barrios y Villas de Emergencia) was founded in 1958 to cope with various social issues and articulate the work of different committees from different Villas (Acosta et al, 2011).



**Figure: 5.5:** ‘Villa Esperanza’ during the 1950s. The figure shows the Villa as a permanent settlement and the conditions of the houses. Source: <http://www.arcondebuenosaires.com.ar/retiro-villa-desocupacion-actual-31.jpg>



**Figure: 5.6:** This figure shows the inhabitants of the villa building their own houses during that time (1950s) . Source: <http://photos1.blogger.com/blogger/1954/1814/1600/villa%20desocupacion.6.jpg>

The dictatorship of 1976 used urban policies that sought to regulate the urban space's right. For this purpose during the dictatorship (from 1976 until 1983) they put into practice two planning instruments: the urban planning code of Buenos Aires City in 1977 and the 8912 'land use' law from Buenos Aires province influencing the land prices increase in the suburbs. This caused the disappearance of economic subdivisions and therefore one of the ultimate ways to have access to housing in former periods (Acosta et al, 2011). The urban policies designed by the dictatorship related to the villas can be summarized to three main concepts: freeze, eliminate and discourage (Acosta et al, 2011). The 'freeze' strategy implied a census, in order to obtain a survey of the population, and thus avoid future growth. The 'discouragement' strategy consisted of several actions aimed to ensure that people will leave by irritating them (using violence and repression against them) so they would prefer to move, rather than continue in that situation. Nonetheless, if the inhabitants resisted the 'discouragement', they put into practice the last strategy: the 'elimination', by taking the people to the countryside and the immigrants were forced to return to their home countries. By the end of the dictatorship, only 44 families remained from the estimated 6000 that were living at the Villa 31 at the 1970s (Acosta et al, 2011). Notwithstanding, in the CABA the variation of the population in villas has been high from 1962 to 2001. The latest efforts of the government of the city announced plans for the establishment and eradication sporadically and contradictory, creating uncertainty among the people. By the year 2004, The Villa housed about 15000 people. Nowadays the estimation is around 40000 people (INDEC, 2015). It has serious problems regarding the provision of public services (such as electricity, water and telephone). It has two delegates' bodies, one of Villa 31 and one in 31bis, reflecting different treatment by the authorities (Cravino et al, 2008).

## Socio-economic/ Demography

The first organizations in the Villa 31 emerged in a similar way to the others in order to counter the most critical effects related to poverty through ties of solidarity and mutual aid networks. In addition, organizations related to sports were also founded, especially football and entertainment (clubs, youth associations) as an expression of "neighborhood sociability" (Acosta et al, 2011). Therefore, they preserve those 'empty' spaces for the practice of football (see figure 5.7).

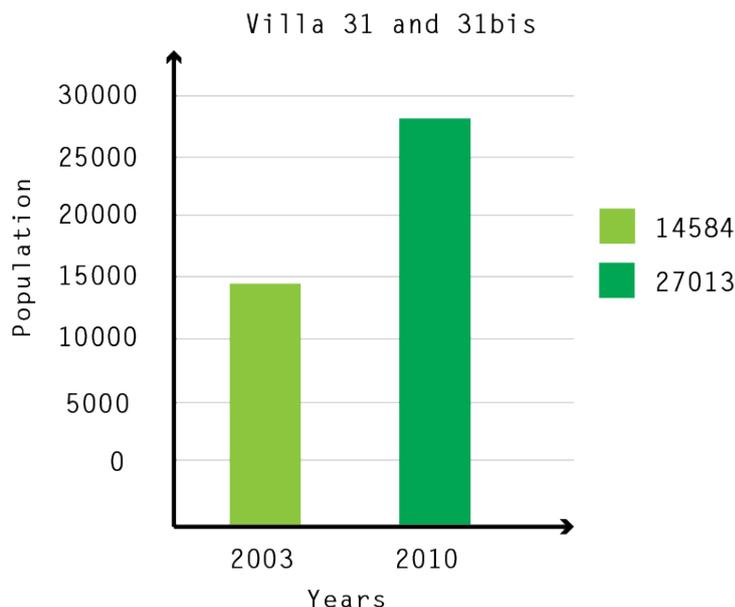
In 1962 the population of villas accounted for 1.4% of the overall population of the city; in 1976 this proportion raised to 7.2% while in 1980, after eradication policy carried out by the dictatorship, it has lowered 1.2%. With the return of democracy (1983) the upward trend continued: 1.7% in 1991 and 3.9% in 2001. According to the Housing Institute of the City of Buenos Aires (IVC, 2005) 14584 people were living in the villa in 2003. Similarly this source states an estimation of 3.3 persons per household (houses of 15m<sup>2</sup> to 18m<sup>2</sup>), whilst also showed that 38% of families must share housing (see figure 5.8, 5.9, Appendix B), resulting in an extremely high overcrowding (Cravino et al, 2008).



**Figure 5.7:** Football soccer field of the Villa 31 is one of the few public spaces in this high-density area. Source: <https://www.pinterest.com/pin/387661480400370449/>



**Figure 5.8:** Shared houses of less than 18m<sup>2</sup> among 4 people leads to overcrowding. Source: [http://cdn.citylab.com/media/img/citylab/2015/01/RTR3FTKE/lead\\_large.jpg](http://cdn.citylab.com/media/img/citylab/2015/01/RTR3FTKE/lead_large.jpg)



**Figure 5.9:** Population chart of Villa 31 and 31bis. Source: Author, based on the tables from Dirección General de Estadística y Censos (Appendix A and B).

Currently the inhabitants of Villa 31 and 31bis are people that were born in the neighborhood, people from different provinces that came to CABA seeking for better job opportunities and who brought their own cultural traditions and their distinctive customs (Jauregui, 2004). Also, half of the population of the villa (51,1 %) (INDEC, 2010) are immigrants from neighboring countries, mainly from Paraguay, Bolivia and Peru, making this community a place of potential interest to areas nearby, mainly because of the cheap labor forces and for various types of activities and cultural singularities (Jauregui, 2004). Nowadays the population is estimated to be 40000 people (Dirección General de Estadísticas y Censos, 2015). The education level is generally low, with a high percentage of people dropping out studies and also illiteracy. About 95% of children attend primary school, but only 10% of teenagers attend secondary school. Much of the working age population is unemployed or under-employed, or in some cases they are working but earning very low wages (Arenas, 2002) specially as workers in the construction business.

## Environmental

Environmental conditions are precarious as it is a highly polluted area (there are large amounts of garbage strewn around the villa). Many houses are built with brick, but others have been constructed with sheet metal, wood or cardboard (see figure 5.10) causing difficulties and problems with rain and during poor weather conditions. Storm water causes floods and deteriorates the poorly built street infrastructure (figure 5.11). Health conditions are poor, with widespread existence of respiratory, parasitic, digestive and mental illness (Arenas, 2002).



**Figure 5.10:** The figure illustrates the environmental conditions of the Villa as the garbage is thrown in the streets and empty spaces. Source: <http://argentina.indymedia.org/news/2006/05/404442.php> Photography from 19/20 N° 14 Proyects, photographer Pablo Vitale.



**Figure 5.11: Most of the streets are** Unpaved which complicates the mobility of the settlers during rainy days. Source: <http://argentina.indymedia.org/uploads/2006/05/autopista.jpg> Photography from 19/20 N° 14 Proyects, photographer Pablo Vitale.

## Spatial Changes

The Villa is divided into three sections due to its incredible extension: the historic Villa 31, the Villa 31bis that has developed this past 15 years and the recent settlement below the highway near the abandoned railway land and former warehouses (see figure 5.12, 5.13). Each sector is bound and shows a different identity from the rest, depending on the residents' trajectories regarding their jobs, activities and family relations but also of preconceptions from the people outside the villas (Acosta et al, 2011).



**Figure 5.12:** The three sections of the Villa. The Villa 31 (1) is the first settlement that emerged 83 years ago. The 31Bis (2) is the expansion of the former one that has been developed through the last 15 years. The Settlements below the Highway (3) are have been developed recently. Source: Author Adapted from Google Earth.



**Figure 5.13:** Aerial image of the villa's three sections. Source: Adapted from [http://fernandezcastro.com.ar/blog/wpcontent/uploads/foto\\_muestra\\_23.jpg](http://fernandezcastro.com.ar/blog/wpcontent/uploads/foto_muestra_23.jpg)

The following analysis is set in different time periods that were selected according to the available data and to critical changes the slums' fabric presented along the years. There are no maps from the year 1930 until the year 2000. Additionally the slum did not present fundamental fabric changes during this period. Nevertheless the following timeline (figure 5.14) shows the socio-economic and institutional events the country and city have faced that influenced the spatial composition of the area through five different phases.

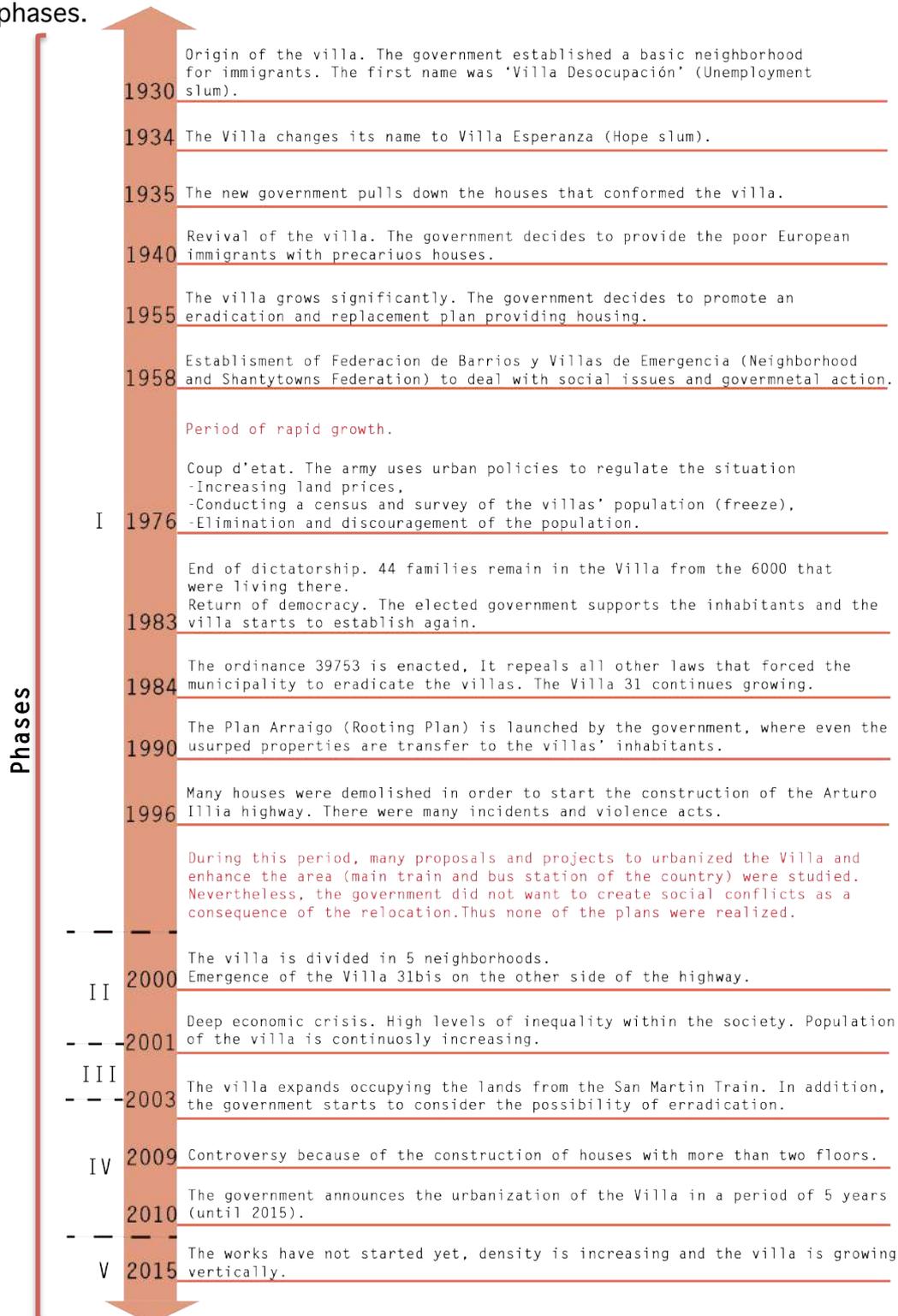


Figure 5.14: Timeline from the different phases of the Villa 31. Source: Made by the author.

## Phase-period 1930-2000

The first phase covers the time span from 1930 to 2000. It has been described within the policies and institutional conditions and it is also shown within the timeline (figure 5.14). The period from the villa's origin until the year 2000 is characterized by political discontinuity, dictatorships, economic growth, economic crises, eradication plans and return of the democracy. As a result, the villa had periods of growth and expansion, and periods of stagnation. The area of the Villa was 200866 m<sup>2</sup> (Government of the City of Buenos Aires, 2015).

## II Phase-period 2000-2001

The second phase (fig. 5.15) starts from the year 2000 on and shows the concentration of informal houses on the other side of the highway Pres. Arturo Illia. Despite the villa was gradually growing in hand with the population growth, it has been boosted from the 2000 onwards. Until the year 2000, the Villa 31 had expanded on its current location, in which the people inhabited every vacant land within the surrounding constraints (private properties, YPF deposits (State Gas company), streets, etc.).

Afterwards, the people started to settle and occupy the available land situated right next to the Villa 31 in between of the abandoned wagons (former Train Station). The villa spread out horizontally (around 30 blocks), with houses of one floor built with waste materials (INDEC, 2010). The economic crisis takes place in this period. On the one hand, the population was conformed by Argentinians from lower class seeking for housing solutions. On the other hand, the inhabitants were immigrants from border countries' that came looking for better living alternatives as other authors have mentioned above (INDEC, 2010; La Nación 2013). Hence, the Villa 31bis emerged as an extension of the Villa 31. By the year 2001, 12204 people were living in the Villa (INDEC, 2010).



**Figure 5.15:** Aerial image of the Villa from phase II. Source: Author Adapted from Google Earth.

### III Phase- Period 2001-2003

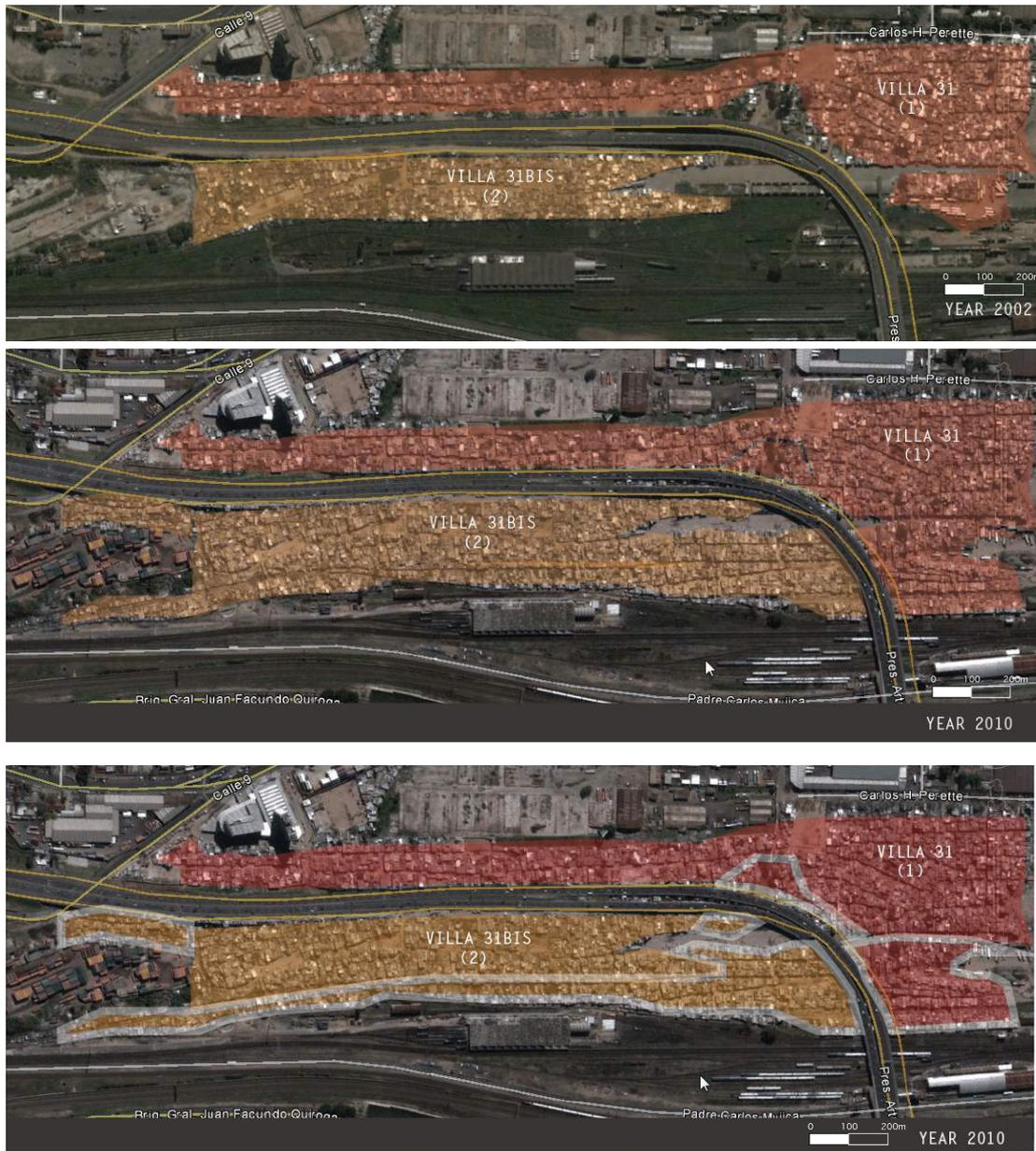
The third phase is characterized by severe consequences of the 2001 economic crisis that impacted within the society and brought many social issues increasing the levels of poverty, unemployment, inequality, housing demand, and population growth, especially in big cities such as the CABA, which received many people from the provinces (INDEC, 2010) that were seeking for better opportunities. Hence, these events fostered the development of the villa and in a period of two years the new residents started to occupy the vacant land at both sides of the Arturo Illia highway (figure 5.16). The figure shows the density and horizontal expansion the villa experienced (35%) between those two years (2000-2002) with the 3,9% of the city population living there (Dirección General de Estadísticas y Censos, 2012). By the year 2003 the population reached 14584 people (Dirección General de Estadísticas y Censos, 2012).



**Figure 5.16:** Villa's aerial image from phase III. The third picture shows the expansion between the year 2000 and the year 2003 in which the 31bis doubled it size. Source: Author Adapted from Google Earth.

#### IV Phase- period 2003-2010

The fourth phase (fig. 5.17) is characterized by different elements of conflict in relation to its expansion that is also illustrated in the spatial fabric. Since 2009 Villa 31 is growing vertically with constructions of more than 2 floors. This is an important difference to the former spatial development. These extensions seek to provide housing solutions for new residents and immigrant's generations; in other cases, they are intended for illegal rental. Moreover in the last years the people have settled in areas that until now were unused based on an agreement between authorities and the neighborhood representatives (Acosta et al, 2011).



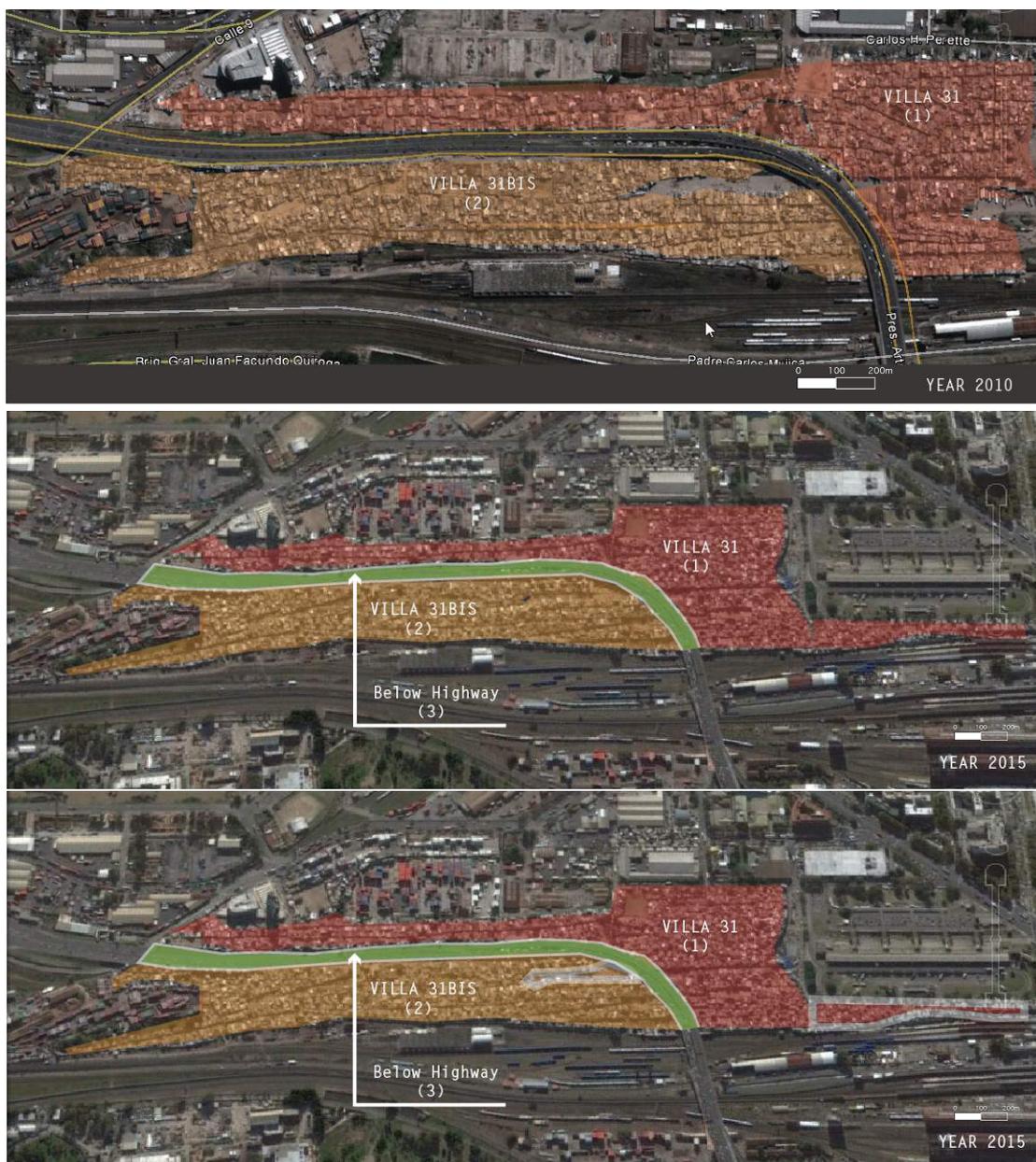
**Figure 5.17:** Aerial image from the Villa's phase IV shows the impressive growth of the villa in eight years (from 2003 to 2010). Source: Author Adapted from Google Earth.

In nearly half a century (1962- 2010) the number of slums in CABA have doubled, their population has increased four times, the horizontal expansion

and density have also doubled, the number of houses were multiplied by 3,5 and the ratio of people per household has increased (Dirección General de Estadísticas y Censos, 2012; Dirección General de Estadísticas y Censos, 2015). In this period, the Villa 31 and 31bis's houses have more than three floors. According to the National Institute of Statistics and Censuses (INDEC, 2010) there are 8904 households of approximately 15m<sup>2</sup>-18m<sup>2</sup> each (three people per house). It has also indicated that this slum had 27013 inhabitants.

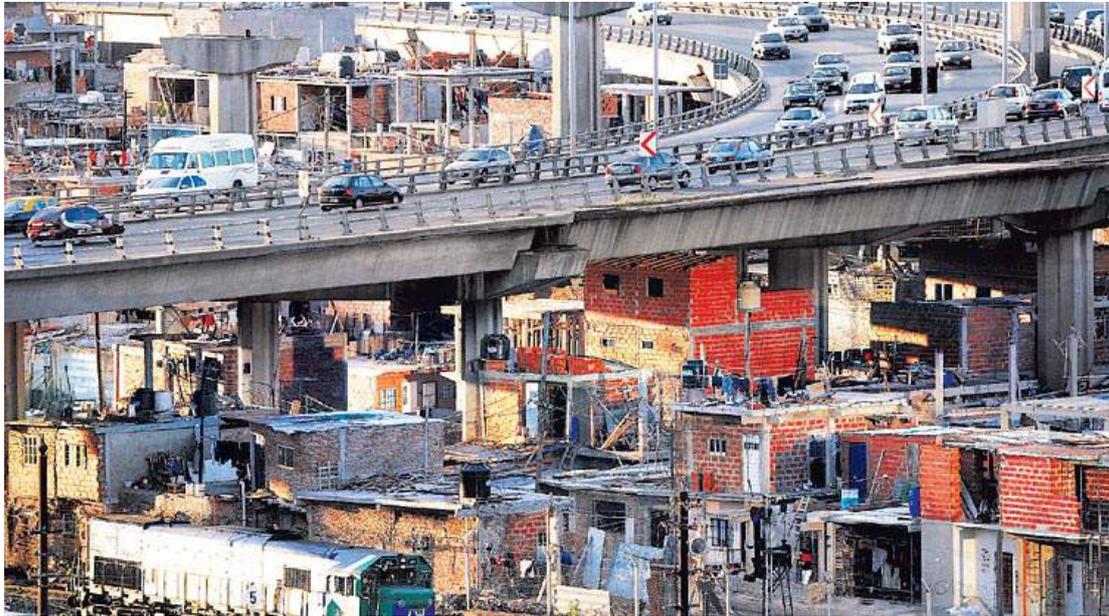
### V Phase- period 2011-2015

The last phase (fig. 5.18) encompasses the period between 2011 until 2015. There is no more empty land available to extend horizontally unless they start to build on the railways or private land (parking, YPF deposits, etc.).



**Figure 5.18:** Aerial image from the Villa's phase V (2011-2015) The area coloured in green represents the settlements under the Arturo Illia Highway. Source: Author Adapted from Google Earth.

The residents have also occupied the area below the Arturo Illia highway (see figure 5.19). The vertical development continues because these constructions represent similar functions to the mentioned expansions, but they would also include, according to several neighbors, illegal real estate projects aimed at gaining income by the rental or sale of housing or from the speculation of eviction and consequent potential compensation.



**Figure 5.19:** Houses under the Arturo Illia Highway. This picture illustrates the low quality of the constructions and the overcrowding in which the inhabitants are living. These houses are built one next to each other without any proper distance between them. The reader could also make an idea of the environmental conditions not only because of the lack of facilities, but also due to its proximity within the highway. Source: <http://www.infobae.com/2015/04/12/1721811-la-impunidad-absoluta-la-que-se-mueven-las-mafias-que-usurpan-terrenos-la-villa-31>

Thus the high density of the villa (3,3 people living in 15m<sup>2</sup>) denotes, first, that a possible urbanization is more complex because it also involves avoiding overcrowding that is happening today. Furthermore, as the speculation cases increase<sup>2</sup>, it weakens the legitimacy claim of permanent residents and breaks the settings set by a complaint from the neighbors to the state (Acosta et al, 2011). Thus, 70% of the houses in the villa have more than three floors (see figure 5.20) (Corsalini and Hagelstrom, 2015).

Nowadays, it is estimated<sup>3</sup> that the population exceeds 40000 inhabitants (La Nación, 2013); of which nearly 51% of the population is from other countries: 23.9% Paraguayans; Bolivian 16.6% and 9.8% Peruvians. It is likely that the villa will continue developing vertically. There were areas where houses were pulled down in order to build new ones prepared to support more than 4 floors. A parallel line within the railways has been urbanized passing under the highway. Moreover, the slum has also spread between

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<sup>2</sup> There is speculation about a potential eviction from the Villa and consequent compensation among the residents of the villa (Acosta et al, 2011).

<sup>3</sup> In Argentina the National Census is conducted every ten years, the last one was in 2010. Therefore, the same source launches estimation reports every year.

Retiro bus terminal and San Martin train station. The ratio of people per household has increased again (4 people per house of 15m<sup>2</sup>). In 15 years the villa has doubled in spatial extent, thus, taking 15 years to show the same growing patterns as their first 70 years. The area is about 651735 m<sup>2</sup> (Government of the City of Buenos Aires, 2015).



**Figure 5.20:** This figure illustrates the environmental and overcrowding conditions of the Villa and the height of the houses of more than three floors. There is neither proper constructions nor proper distance between the houses for good ventilation and privacy. The roofs do not have appropriate slopes to drip the rainwater. These are floors of no more than 15m<sup>2</sup> shared by three/ four people. Some residents rent those floors illegally. Source: [http://www.perfil.com/fotogaleria.html?filename=/contenidos/2015/05/16/noticia\\_0100.html&foto](http://www.perfil.com/fotogaleria.html?filename=/contenidos/2015/05/16/noticia_0100.html&foto)



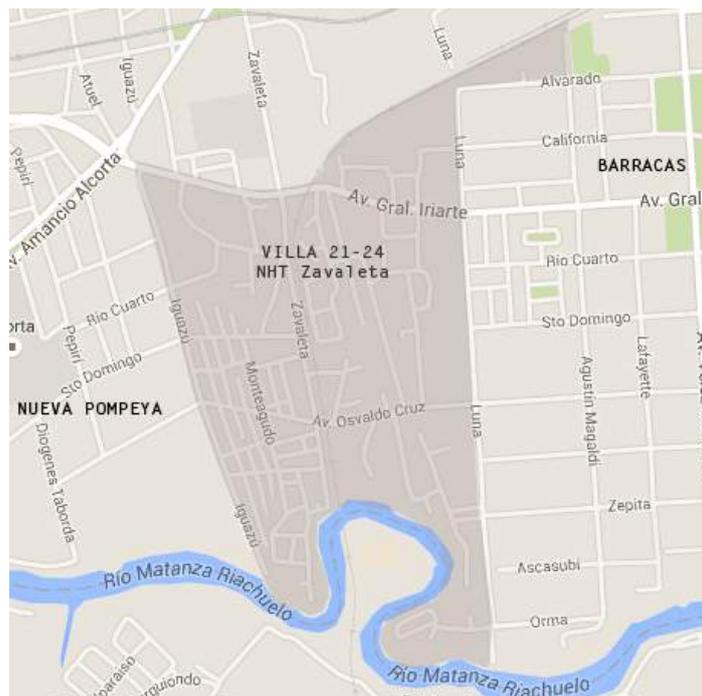
**Figure 5.21:** The spatial development phases together from 2000 until 2015. The maps clearly shows the horizontal expansion within the area. Source: Author Adapted from Google Earth.

### 5.3 Villa 21-24 NHT Zavaleta.

The Villa 21-24 NHT Zavaleta is located in the southern part of the CABA (see figure 5.22), between Barracas neighborhood within the District 5, Commune 4 and Nueva Pompeya Neighborhood. The villa is delimited by the following streets: Magaldi Street, the former railway, Sin nombre Street (No name), Iguazu Street, Iriarte Avenue and the Matanza Riachuelo River (which detaches the CABA from the Buenos Aires Province) (see figure 5.23). It is composed of 35 house ‘strips’ which are divided by internal corridors. Across the river, the Saturnino Moure football stadium stands, a green field that is contrasting the overcrowded condition of the villa.



**Figure 5.22:** Location of Barracas Neighborhood at the south-east of CABA. Source: Author Adapted from [http://commons.wikimedia.org/wiki/File:Barracas-Buenos\\_Aires\\_map.png](http://commons.wikimedia.org/wiki/File:Barracas-Buenos_Aires_map.png)



**Figure 5.23:** Map of Villa 21-24 NHT Zavaleta. Source: Author Adapted from a Google Maps picture.

The villa is known within and outside the settlement as NHT Zavaleta and ‘Strips’ (that shape the 21 and 24) because on the one hand, in the NHT Zavaleta area, the houses the state originally designed as ‘temporary’ still remain (being the oldest part of the villa) (Government of the City of Buenos Aires, 2011). On the other hand there are two other sectors: the 21 and 24 (see figure 5.24); one contains ten strips and another consisting of thirteen strips of small houses of 15 m<sup>2</sup> which have villa housing features (precarious infrastructure with made with sheet metal, wood or cardboard); those houses were designed and built by the state in 1969 as a strategy of coercive eradication of the ‘villeros’ (villas’ inhabitants) from the city.



**Figure 5.24:** The villa is subdivided in three sections/areas according to their building characteristics and period of appearance. The area coloured in green is the oldest part (called NHT Zavaleta); the area coloured in yellow is called 21 and contains 10 strips of houses and the area coloured in red is called 24 and contains 13 strips of small houses. Source: Author Adapted from a Google Earth picture.

In addition, added to the housing constructive issues, the slum presented a poor and collapsed sewage and storm water system since the infrastructure was built and designed for temporality and not for permanence (Government of the City of Buenos Aires, 2011).

## Development of the Villa

### Policies and Institutional conditions

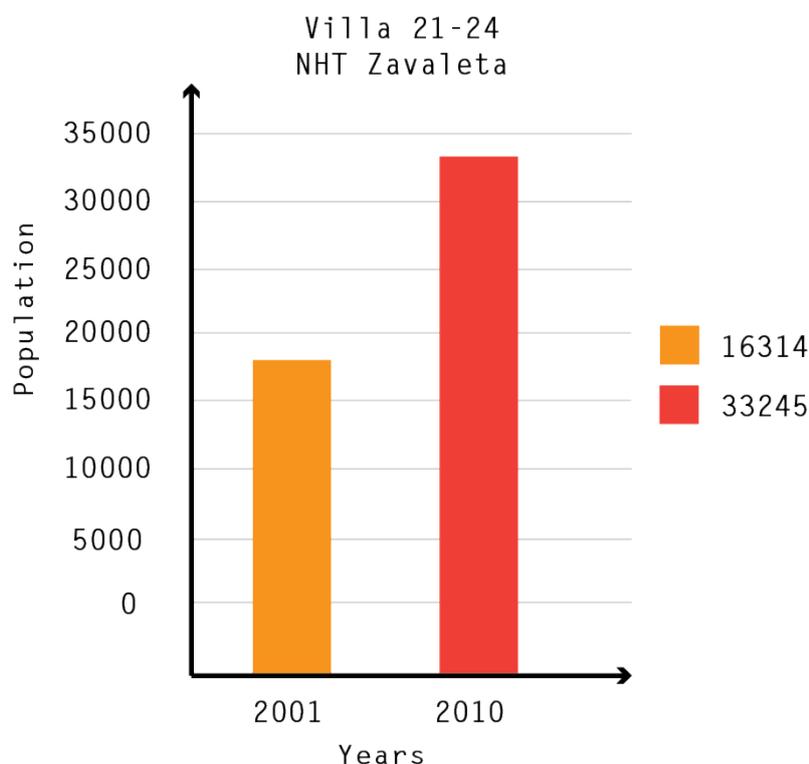
The villa emerged during the 1940s due to the economic stagnation in rural areas and the industrial development that the CABA was going through, which generated a large demand of labor houses (Castañeda et al, 2012). Hence, people from the countryside moved to the city in order to get a stable job and also a cheap place to live. Settling in the villa was popular because of the close proximity to the railway and train station. In 1952, a big fire destroyed La Boca neighborhood (next to Barracas) burning several houses resulting in a location shift and resettlement to another area: the vacant land near the Riachuelo River. The local people began to develop the area by building their own houses (Castañeda et al, 2012). In the new area proper infrastructure provisions were lacking such as electricity and water access (i.e. 2 taps for a neighborhood of more than 200 people). The houses were built out of cheap and available building material like cardboard and sheet. By the end of the 1960s the state launched the Zavaleta Transitional Housing Core (NHT) to house temporarily the people that were eradicated by other shantytowns and the ones that were affected by floods (Castañeda et al, 2012). In the 1962 a census was conducted with the result of 334 people living in the Villa. In the middle 1970s the population grew immensely, reaching the 12000 inhabitants (Bellardi, De Paula, 1986).

This type of temporary housing was created to teach the ‘true ways of life’ that the military government considered that every citizen had to have. There were established to discipline the population, which had to adapt and acquire a ‘sense of ownership’ before moving to permanent housing (Castañeda et al, 2012). The establishment of the ‘Federación de Barrios y Villas de Emergencia’, the residents of the 21-24 and NHT Zavaleta held meetings where they shared opinions and ideas to solve their problems regarding mainly water, electricity, sewers and garbage. The dictatorship from 1976 brought similar consequences between the Villa 31 and the 21-24 Zavaleta. They aimed to conduct an eradication plan for the slums that was actually successful. In addition, the inhabitants from the Villa 31 were brought to the 21-24 NHT Zavaleta, and they were forced to share housing (Castañeda et al, 2012). The democracy returned in 1983 together with positive changes for the ‘villeros’. The elected government supported them prohibiting the eradication laws. Since then an uninterrupted repopulation continued until today reinforced by the economic situation the country has been going through.

### Socio-economic/ Demographic

According to the Dirección General de Estadística y Censos (2010) the Villa has doubled its population size from the year 2001(16314 people) until 2010 (33245 people) (see figure 5.25). Nowadays the same source

estimates a population of 50000 people. As being the biggest slum of the city it presents the highest level of insecurity, crime, drug deals, etc. (Government of the City of Buenos Aires, 2011; La Nación, 2012), thus it is usually named in media due to its dangerous condition. It experiences many conflicts between their inhabitants, different gangs and drug dealers which makes the slum one of the most contentious places of the city. It is a history of government policies that lack of continuity (Government of the City of Buenos Aires, 2011). The main economic activities of the villa's inhabitants are related to construction works (in the case of men) and domestic labors (in the case of women) (Castañeda et al, 2012). Their social life is strongly linked to football fields within the villa, where they gather everyday to play a game or socialize with other neighbors. Some of the most famous football players in Argentina have born in villas (La Nación, 2012).



**Figure 5.25:** Population chart from Villa 21-24 NHT Zavaleta. Source: Author, based on the tables from Dirección General de Estadística y Censos (Appendix A and B).

## Environmental

As with the previous case (Villa 31 and 31bis), the 21-24 NHT Zavaleta experiences structural problems regarding pollution and poor environmental conditions mainly because of the large amounts of garbage strewn on the corridors (due to the insecurity the garbage collectors do not want to enter in the villa), the inappropriate sewage system and the massive overcrowding (see figure 5.26 and 5.27) (Government of the City of Buenos Aires, 2011).



**Figure 5.26:** The image illustrates the environmental conditions of the Villa. The villa lacks of a garbage collection system, thus the residents throw their waste on the corridors and on empty spaces such as the coastline. Source: <http://www.panoramio.com/photo/1886764>



**Figure 5.27:** The corridors of the villa are narrow and the proximity from the constructions prevents the proper ventilation of the rooms. In addition, the residents leave their garbage next to their houses worsening the conditions. Source: <http://www.taringa.net/posts/noticias/16561719.html>

## Spatial Changes

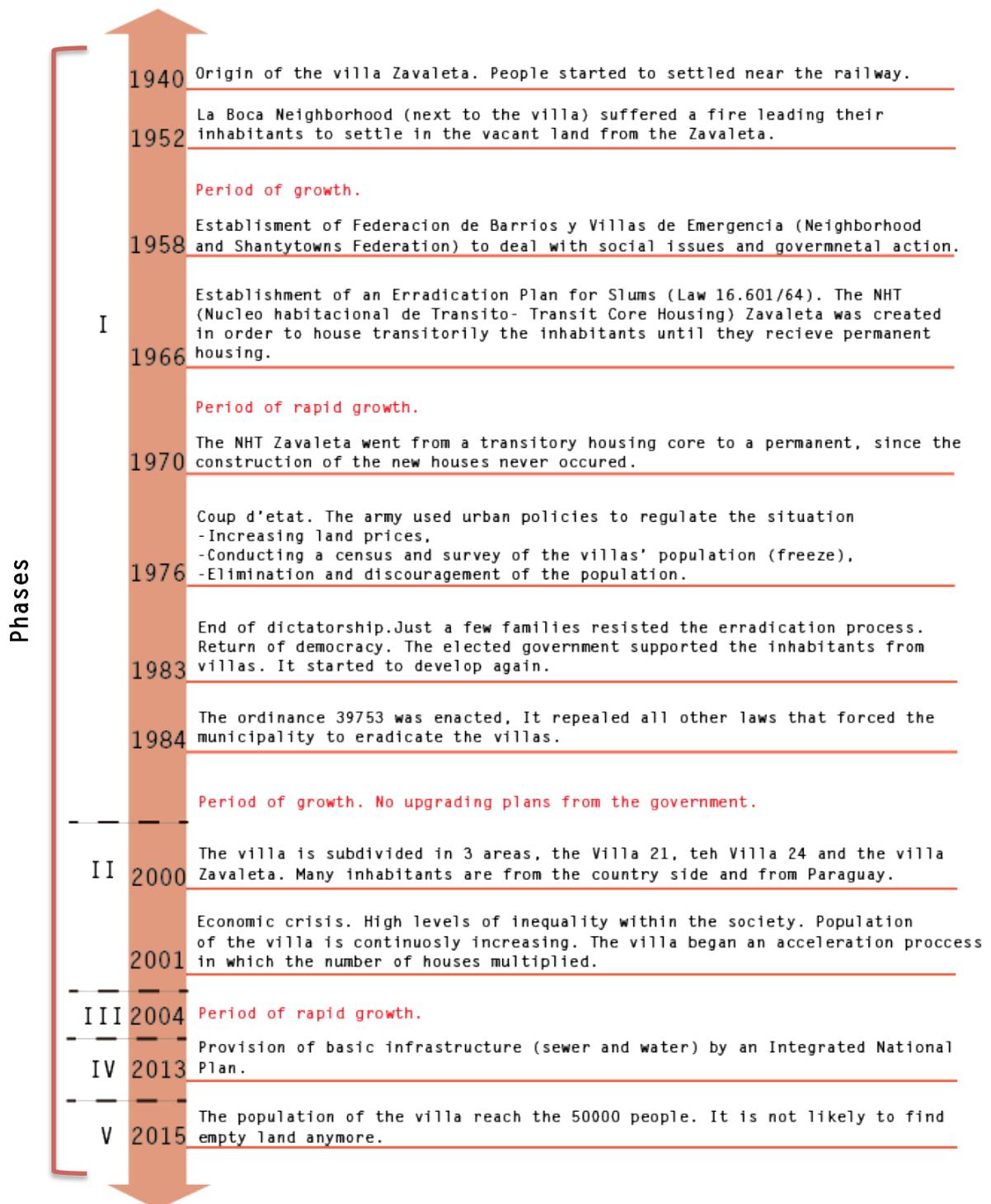
The following analysis is made under time periods, which were set according to the collected data. There are no maps available from 1940 until the year 2000. Hence the first period is analyzed within old pictures, documents and academic articles. The timeline (figure 5.28) was made according to those documents and shows the socio-economic and institutional events the country and city have faced that clearly influenced the spatiality of the area.

### I Phase-period 1940-2000

The area of the Villa by the year 2000 was about 530558 m<sup>2</sup> (Government of the City of Buenos Aires, 2015). Although the population of the CABA is around 3.000.000 inhabitants from half of the twentieth century, the number of residents in villas presented a marked variability associated with the implementation of various policies from the state, the changes in the strategies from the villas' residents and several migratory movements that considered the City as the first destination option for permanent residence (Dirección General de Estadísticas y Censos, 2015). Therefore, this phase is characterized by a discontinuous growth (table 5.) as a consequence of the eradication plans that the military government initiated in 1966 and 1976 (which were intended to take the slums' residents to the CABA suburbs, or to other cities from the provinces or from neighboring countries). It resulted in an evident reduction of population, of housing, of villas' density and the amount of settlements (100 families resisted the eradication plan) (Dirección General de Estadísticas y Censos, 2015).

Year	1962	1976	1980	1991	2001
Population	334	12120	6525	10822	16314

**Table 5.1** Population of Villa 21-24 NHT Zavaleta. Source: Author, 2015 based on Dirección General de Estadísticas y Censos.



**Figure 5.28:** Timeline from the different phases of the Villa 21-24 NHT Zavaleta. Source: Made by the author.

## II Phase-period 2000-2002

The second phase lasts to 2002 (see figure 5.29); it presents the major concentration of houses in the area called 24 (right side); the oldest area of the villa remains the same and the area called 21 started to be occupied (these sections of the villa are shown in figure 5.24, p. 45). From this year on, in a similar way to the villa 31 and 31bis, the population started to increase rapidly with persons from other countries (Paraguay, Peru, Bolivia) and Argentinians from the provinces (INDEC, 2010). Following economic crisis of 2001, the villa started a process of continuous growth.



**Figure 5.29:** Aerial image of the phase II from 2000 to 2003. Source: Author Adapted from Google Earth.

## III Phase-period 2002-2004

The maps from the phase III (figure 5.30) show various sequels of the 2001 economic crisis (increasing density and horizontal expansion due to the large amount of people moving to the slum) (INDEC, 2010; La Nación, 2012). The growing pattern (fig. 5.30, green color) is from 2004 in which people settled near one access to the villa (Iriarte avenue). As a consequence the authorities agreed that infrastructure, services and living conditions had to be improved. Nevertheless it implies large investments and the pace of the works so far has been slow.



**Figure 5.30:** Aerial image of the phase III from 2002 to 2004. Source: Author Adapted from Google Earth.

#### IV Phase-period 2005-2010

The following phase lasts from 2005 to 2010 (figure 5.31). In this time period the country was recovering from the crisis and the number regarding poverty was also high (INDEC, 2010). According to the local media (La Nación, 2012; Clarin, 2012) rental prices grow significantly in Barracas neighborhood leading their inhabitants to seek for other options such as a small house in the villa. The state began to provide social guarantees regarding different aspects (health, education, housing, etc.) that generated

a massive migration from neighboring countries (INDEC, 2010). This period is characterized by a large expansion throughout the empty spots within the whole area. Compared to the Villa 31 and 31bis, it presented a vertical development but the constructions did not exceed more than two floors. By the year 2010 the population reached 33245 people (INDEC, 2010).



**Figure 5.31:** Aerial of the phase IV from 2005 to 2010. Source: Author Adapted from Google Earth.

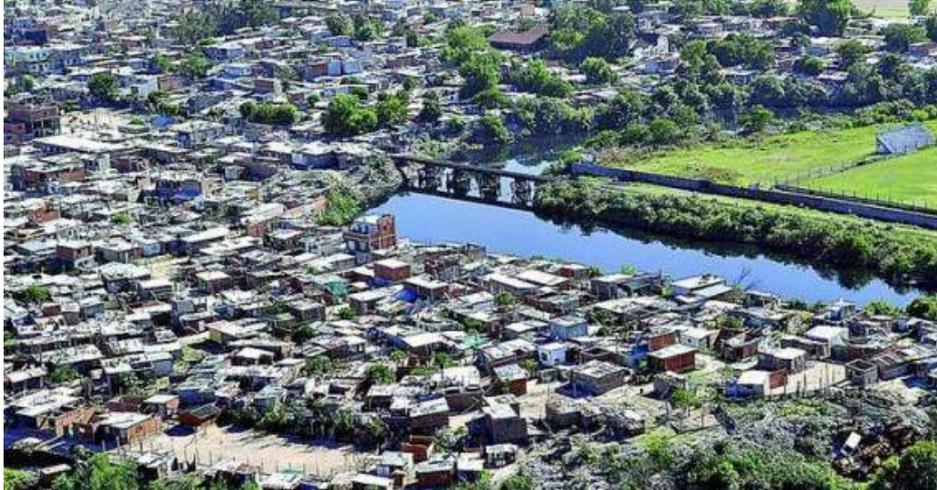
## V Phase-period 2010-2015

The last phase (V- figure 5.32) shows clearly the occupation from all the available land that had remained. It includes the vacant land within the vicinity of Barracas club (top of the picture) and the southern coastline (see figure 5.33). Additionally, the estimative population reaches the 50000

people (La Nación, 2012 on INDEC, 2010) and as the villa continues growing a horizontal expansion is not feasible anymore. They might start a vertical development as the villeros from the 31 did. Currently, the villa is 944614 m<sup>2</sup> (Government of the city of Buenos Aires, 2015).



**Figure 5.32:** Aerial image of the V phase from 2010 to 2015. Source: Author Adapted from Google Earth.



**Figure 5.33:** Current image of the southern part of the Villa. This image shows the difference within the Villa 31 y 31 bis regarding the expansion; Villa 31 y 31 bis is growing vertically while Villa 21-24 NHT Zavaleta has houses of no more than two floors : <http://diariodeflores.com.ar/wp-content/uploads/2014/11/villa-21-24.jpg>

#### 5.4 Synthesis of the two case studies.

The case studies have been described from different perspectives: planning, socio-economic, environmental and spatial. The spatial layer has a pivotal role within this analysis since the spatial changes shown (specially from 2000 onwards) have directly influenced the other patterns.

Even though these two case studies are embedded in the CABA, they have distinctive characteristics related to their very specific context. Nevertheless both have experienced similar events (related to the country's development) from their emergence (within a difference of 10 years between them) until recent times that led to the emergence of different patterns.

#### Planning

As it has been described above, the Villa 31 was at first created by the Government during the 1930's in order to house the immigrants' flows. Over the years, the villa grew significantly until the 1950s, in which the Government decided to promote an eradication plan that was reinforced by the dictatorship in the 1970s. As a response, the 'villeros' from all the villas of the city established the Neighborhood and Slums Federation (Federación de Barrios y Villas de Emergencia) to overcome social issues and conflicts within the Government. By the end of the dictatorship, only 44 families remained. With the return of the democracy the elected government supported the villeros and repealed the eradication policies. From the 1980s onwards, the villa has undergone a development process influenced by economic crisis and immigration without any governmental control. The Villa 21-24 NHT Zavaleta has emerged, contrasting the Villa 31, in a more spontaneous way. The first settlers came from the countryside due to the labor demand to the capital city. They occupied the vacant properties at the south of the city since this area was an attraction pole as its close proximity

to the railways. Hence, those people began to develop the area by building their own houses outside the governmental institutional framework. The big fire of La Boca in the 1950s influenced the expansion of the villa. During the 1960s, the government promoted the Transitional Housing Core (NHT) to house the eradicated villeros from other Villas.

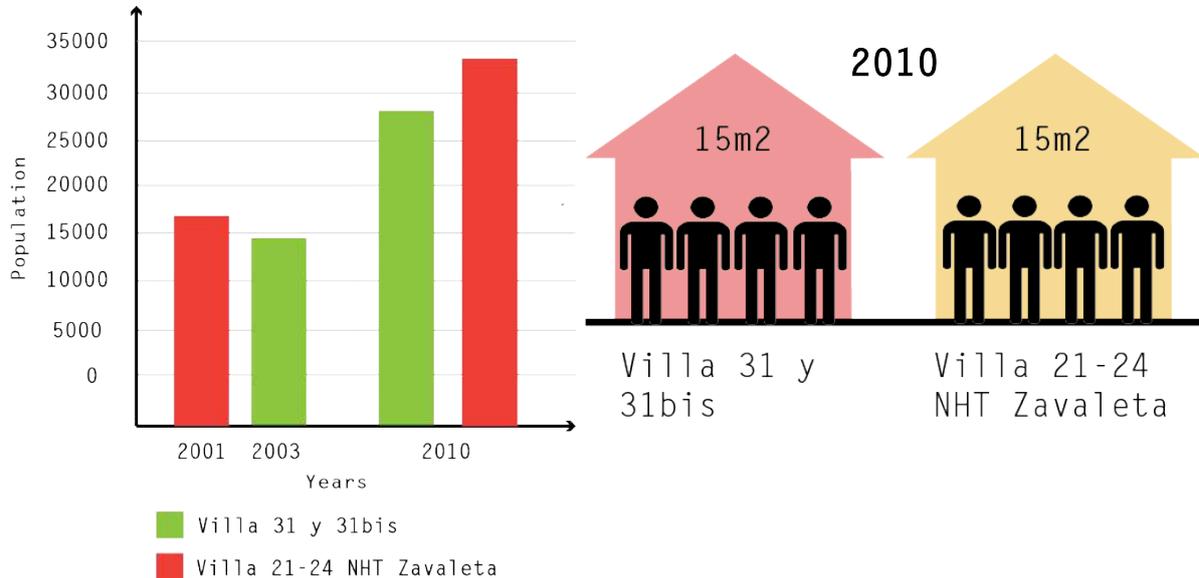
Nonetheless, this type of temporary housing was created to discipline the villa's inhabitants about the 'true way of life' and how to behave before moving to a permanent house (Castañeda et al, 2012). As the villeros from the Villa 31, they also participated in the meetings of the 'Federación de Barrios y Villas de Emergencia'. The dictatorship from 1976 brought similar consequences as within the Villa 31 regarding the eradication plans. This is the period in which both villas intersect, since eradicated people from the Villa 31 were brought to the 21-24, forcing them to share housing. Additionally, many locals were sent to the countryside. By the end of the dictatorship, the Villa began a development process since the elected government prohibited all eradication policies. This expansion continued until recent times. The only action from the current government was the provision of sewer and water by the Integrated National Plan.

It can be concluded that the city, so as the country, has suffered several governmental changes resulting in a weak state in which the design and implementation of planning policies were according to different political and ideological beliefs. Hence, the city lacked, and still lacks of governmental continuity. Thus the inhabitants of the Villas have acted jointly in order to fight for their rights as citizens and their neighborhoods with the creation of the Neighborhood and Slums Federation (Federación de Barrios y Villas de Emergencia). The increasing growth of the villa fostered the emergence of this institutional pattern as a self-organizing association to overcome social and political issues.

### Socio-economic/ Demographic

The unstable socio-economic context (one of the 2001 economic crisis' outcomes) of the city and hence of both Villas' inhabitants, has influenced their expansion. Firstly, because of their strategic location since both Villas are situated in attractive areas nearby the railways and train station where cheap labor forces are needed for many activities and they also have access to a wide range of urban transport. Besides, the villa 31 is also near the city center (commercial core of CABA). Secondly, In the case of the Villa 31, there is an interesting cultural diversity because half of the population has emigrated from neighboring countries bringing with them their own traditions and beliefs and thus making the community a place of potential interest to others immigrants who come seeing for better opportunities. Hence, the population from both villas grew significantly (almost 50%) in a lapse of seven to ten years: The villa 31 and 31bis had a population of 14584 people in 2003 (INDEC, 2003); while in 2010 it was housing 27013 that were living in 6956 houses (3,8 people per house) reflecting the high-density of the villa

(INDEC, 2010). Nowadays the estimative<sup>4</sup> population is around 40000 people. The villa 21-24 NHT Zavaleta was housing 16314 people in 2001 (INDEC, 2001) and by the year 2010 the population reached 33245 people living in 7761 houses (INDEC, 2010) (see figure 5.34, 5.35). Currently, the estimative population is around 50000 people.



**Figure 5.34:** Population chart of the two case studies. Source: Author, based on the tables from Dirección General de Estadística y Censos (Appendix A and B).

**Figure 5.35:** Illustration of Villas density. Source: Author, based on the tables from Dirección General de Estadística y Censos (Appendix A and B).

Furthermore the informal situation of the villas and their lack of regulations are also a plus for people that are looking for cheap places to settle without institutional impediments and in the case of immigrants the proper documentation needed. In relation to inhabitants' socio-economic conditions, both Villas present high levels of poverty, illiteracy, unemployment or under-employment. Health conditions are also a worrying issue among the population. Thus, the right to inhabit the city in proper conditions, as was explained in Attoh's perspective (2011) in chapter two has been ignored for them. Moreover, as mentioned above, the first organizations within Villas emerged to counter the most critical problems through continues interaction between all the neighbors (within the Neighborhood and Slums Federation). In addition, the community sociability is mainly expressed through football games and groups, which take care of soccer fields. It is interesting to highlight tis latter element (also related to spatiality) because, despite the high density and occupation pattern though all vacant land showed in pictures and maps from both Villas, the community maintain their public spaces in which the central social activity is a game (see figure 5.36).

Therefore it is worth to say that both Villas share socio-economic features that together with the villa's expansion have triggered a self-organization

<sup>4</sup> In Argentina the National Census is conducted every ten years; the last one was in 2010. Therefore, the institute launches estimative reports every year.

process through the interaction of the villeros within their own neighbors, the government and the changing the environment. They have gone through a small-scale process in order to overcome economic crises, social inequality and poverty.



**Figure 5.36:** This picture illustrates a football field of the Villa 21-24 NHT Zavaleta. The houses border the field demonstrating how the residents preserve those spaces. Source: <https://www.pinterest.com/pin/387661480400370449/>

## Environmental

The inhabitants are living in highly polluted environments mostly because of the garbage thrown on the streets. Even though the government of the city provides a garbage collector service for all the neighborhoods, they do not enter in the villas due to high levels of insecurity. The lack of proper infrastructure (sewer system) and the increasing growth of the slum foster the damage to the ecosystem. As mentioned before (Arenas, 2002) houses floors are of natural ground; in rainy days they suffer from floods into their houses and it is difficult to transit along the streets since the water produces mud. As many of the inhabitants (particularly men) work in the construction industry, they gradually improve their houses using second hand materials. However, the construction final quality does not reach a proper livelihood standard. A logic consequence from the issues mentioned before are the poor health conditions in which the villeros live in Villa 31 and 31bis so as in Villa NHT Zavaleta. Therefore, the rights to make use and receive public services together with the rights to live in a safe and clean environment have been also denied to them.

## Spatial Changes

The case studies have experienced periods of growth and periods of stagnation since its creation (back in the 1930s/1940s) until 2000 due to

diverse events (economic boom, economic crisis, dictatorship, democracy, etc.). The first case, the Villa 31 and 31bis, is divided in three sections: Villa 31, Villa 31bis and the latter development below the Arturo Illia highway that crosses the area. From the year 2000 onwards it has presented an uninterrupted development period. The economic crisis of the 2001 brought numerous negatives consequences for the city and their inhabitants. Many people lost their jobs, their savings and their houses and hence the Villa 31 and its strategic location (near city center, main train and bus station, etc.) became a potential place to start over. Therefore a horizontal expansion began reaching the vacant land at the other side of the highway near the abandoned wagons. Their inhabitants named this new section as the Villa 31bis. The map from the year 2002 clearly shows this growth with a difference of two years.

After the crisis, the country went through an economic recovery period in which many immigrants from neighboring countries (mostly from Paraguay and Bolivia) arrived in order to take advantage of the situation (subsidies, cheap labor, etc.). The majority moved to the Villa 31 for the same reasons that the Argentinian did before (strategic location, work force needed, institutional informality, etc.). The nature of growth consisted in the occupation of vacant land available and then, as the horizontal expansion was not a feasible option anymore, a vertical development started with houses of more than two floors getting profit, at the same time, by renting small rooms to new neighbors. It is important to emphasize that this type of growth pattern (vertical) is not common in Argentinian Villas, being the Villa 31 the first case. The map from the year 2010 evidently illustrates how the villa has grown twice its original size. The last image from this current year (2015) demonstrates how the Villa has spread throughout all the vacant land, also below the highway. The high density is defined by the difference between the villa and the 'formal' traffic showed in the picture. As a horizontal expansion is not possible anymore, they have developed vertically in order to absorb the housing demand. In this sense this vertical growth pattern has emerged as a new type rarely seen in Argentinian slums.

The second case, the Villa 21-24 NHT Zavaleta is also divided in three sections: NHT Zavaleta, 24 and 21. The picture from the year 2000 shows that section 24 is denser than the others. From the year 2001 onwards the villa grew considerably due to economic crisis and its consequences explained above. More than the 50% of section 24 is occupied by the year 2004. In a similar way, after the crisis, the economic recuperation phase was characterized by the arrival of immigrants that settled in the villas of the city. In addition, the increase of property value in Barracas neighborhood forced many neighbors to move from their houses because they could not afford their rents. Again, the right to the city debate popped up since, as Harvey (2008) has explained, the urbanization process is led by the wealthy. Therefore they found cheap housing in Villa 21-24. By the year 2010 the villa had expanded throughout the whole 24 area. By the year 2015 the villa's

traffic presents a high density in comparison with Barracas and Nueva Pompeya neighborhoods (placed at both sides of the villa). It can be seen the difference between the streets of Barracas and Nueva Pompeya neighborhoods with the narrow corridors from the Villa.

As stated before, a shared characteristic from both Villas is how the villeros have maintained their public space where they spend most of their time: the football soccer fields. They have established over all vacant land keeping apart those fields in order to practice the sport. From a spatial perspective, it is interesting to remark this contrasting situation that is shown with the urban traffic maps; on the one hand, the high density is clear, as the housing sector has occupied most of the available plots. On the other hand, the importance of their main social activity reflected on some empty spaces that remain beyond their needs and housing demand (see figure 5.37). From a theoretical perspective it is also important to mention the links within self-organization processes as the residents interactions and actions have maintained those places.



**Figure 5.37:** Saturnino Moure stadium. It is located at the Province of Buenos Aires delimited with the Villa 21-24 NHT Zavaleta by the Riachuelo River. The areas coloured yellow are some of the football fields of the Villa. Source: <http://2.bp.blogspot.com/-4Xn8SXZezbA/UZpl5znrYxl/AAAAAAAjU/7pYZUwRxl4/s1600/isla.png>

As a conclusion both villas have showed a rapid development and growth, doubling their extension in the last 15 years (from the 2000 onwards) in which the Villa 31 and 31bis has expanded from 200866 m<sup>2</sup> in 2000 to 651735 m<sup>2</sup> in 2015; Villa 21-24 NHT Zavaleta has expanded from 530558 m<sup>2</sup> in 2000 to 944614m<sup>2</sup> in 2015. The density is increasing taking every land available to build In the case of the villa 31 and 31bis, the development is now vertical (which is a particular feature for Argentinian villas); in the case of the villa 21-24 NHT Zavaleta, it might be their option to continue building.

Notwithstanding the involvement of the Government in the creation of the Villa 31, it can be argued that its latter development was mainly a self-

organized process triggered by their inhabitants in order to fulfill their basic needs, overcome their social issues and conflicts against the State. The Villa 21-24 NHT Zavaleta has emerged without any governmental control or plan, so at its subsequent development as a self-organized process in response to the housing demand from the lower sectors, not only from the city but also from the country and from the foreigners. Furthermore, the spatial changes presented in both cases directly influence the other patterns: the bigger the villas the bigger the impacts within the environment. In addition as the villas were expanding and housing even more people, more issues started to rise and more solutions were needed. Hence, the Villas' association had to adjusted to new circumstances in order to overcome different matters. Moreover the spatial changes and population growth fostered the poor conditions of the villas and as a consequence different residents' initiatives emerged to solve their economic problems (i.e. illegal rents).

## 5.5 Conclusion.

The spatial development of the two case studies have shown self-organization features that were described in chapter two: it has occurred as result of a constant interaction and dynamism from their inhabitants between them and with external factors and actors; villas' structures are continually adapting and adjusting to diverse socio- economic and political conditions (regulations, different governments and ideologies, economic crisis, society, immigrations flows, etc.) namely through their residents' spontaneity actions. Moreover, after the spatial and comparative analysis it is worth to say that both villas have been experiencing a transition process in which they have changed their character of empty land and small neighborhood to become huge slums.

## CHAPTER SIX: Discussion and Conclusions

The aim of this research is to understand how are the slums (villas) of CABA organized/ self-organized. Hence in order to recognize self-organized processes or how those slums are self-organized, Villa 31 and 31bis and Villa 21-24 NHT Zavaleta were the two case studies chosen. Both were described and compared aiming to identify self-organization characteristics of those settlements, the driving force for their growth and the transition process the villas experienced. Consequently with a better understanding, identify what aspects are important to consider as tools that could enhance the design and implementation of upgrading programs. The interrelations of both case studies within internal and external actors and factors were examined and related to self-organization processes. This chapter then ends the study with the answer of the research questions and recommendations for future researchers.

### 6.1 Findings.

The two case studies present self-organization features which were described in chapter two. First, De Roo (2010) exposes that self-organization processes result from complex contexts in which all their elements are interconnected and interacting constantly. The case studies are indeed a consequence of CABA's complex context (socio-economic crisis, housing demand, poverty, insecurity, governmental discontinuity, etc.) and the interaction of many actors (inhabitants within other villas, the society and the government) in order to overcome their difficulties. Furthermore, De Roo (2010) states that these types of systems are open to change and flux of information and as a result new structures are developed. Both case studies show characteristics of open systems as they have adapted over time (from being vacant land to become overcrowded neighborhoods) namely by the interaction of their inhabitants within internal and external factors (neighbors, government, society, economic crisis) developing their own social and institutional structures (the Villa's association, social clubs, football clubs, etc.). Additionally, those systems emerge and develop in a spontaneous way adapting to their changing environment because they are flexible within their environment (De Roo, 2010). In relation to the case studies, this claim is not completely valid for the first one since the Villa 31 was planned to house immigrants, so it did not emerged in a spontaneous way. However the Villa 21-24 NHT Zavaleta did emerge spontaneously without any plan or governmental involvement as a result of the impulsive occupation of vacant land from the urban poor. Moreover both cases are flexible since they have adapted to the changing environment of the CABA and at the same time there are strong because even they have faced hard times (economic crises, eviction, violence and eradication plans) they were able to maintain their condition as permanent neighborhoods.

**Main question:** How are the Slums (Villas) of Buenos Aires Autonomous City organized/ self-organized?

According to Batty's (2012) statement cities are in flux of people and their actions respond constantly to changed circumstances. This is clear in regards to the case studies described in chapter five because initially, the slums (villas) were, for many families, a temporary solution while seeking for better livelihoods. Nevertheless, for the many issues the country has faced (economic crises, dictatorship, several political parties and ideologies) it became a permanent housing solution. Since the restoration of the democracy (back in the 1980s), the villeros (villa's residents) demanded the regularization of these housing forms, which have been driven by them through their social and territorial organizations. Additionally the exclusion of villeros from material and cultural goods and rights, added to the negative stigma they have (UN-HABITAT, 2012/2013; Bossini, 2008) such as criminals and uneducated people acts as constraints on the urban development processes from other local actors (government, private sector, society). Their rights as citizens have been denied since the quality of urban life has become a commodity for people with money (Harvey, 2008). As a consequence, the villeros, motivated by their own material and physical needs, presented their own initiatives within the production process of the city developing the villa as another form of housing. From the mid-1990s until recent times a progressive process of densification started. Literature supports this statement as Barros and Sobeira (2002) explain that slums are alternative solutions to overcome housing deficit in the light of a self-organized process. Moreover, the villas' residents were adapting and adjusting their structure in order to accommodate to new circumstances. As a result new patterns have emerged that give structure and lead the self-organization process of both villas, which resulted in emerging socio-spatial patterns. Therefore the villa 31 and 31bis and Villa 21-24 NHT Zavaleta are self-organized under those patterns.

Question one: How does the development of these patterns influence the growth of a slum?

The villas' inhabitants have acted and act collectively and spontaneously in reaction to many contextual situations. As a consequence, new socio-spatial patterns emerged. Firstly, as the institutional framework is fragile (not only in relation to urban policies) and it has also been designed and redesigned several times, the residents came up with their own rules through an association in which they can proclaim their right to the city, they discuss their many problems (housing, sanitation, insecurity, etc.) and the potential solutions. The association acts as a meeting point for the slums' delegates who interact and exchange information regarding different issues. The residents are also accountable for the maintenance and function of the institution. Moreover, the social patterns are shown within the residents' interaction in order to manage eventualities and common matters. Besides there are associations linked to the main one, but with a specific focus on public spaces (within villas) and the social activities they conduct, especially

related to sports (football). It has been noticed that they preserve those spaces where they interact with other neighbors (not only by playing a game, but also socializing). According to the author it is clear that the football fields are protected because they do not occupy or develop those lands even having a high land and housing demand. So, they respect and follow their own social institutions that they have self-established. The author supports this finding with the spatial analysis made in chapter five (in which the only empty spots are the football fields) and in many publications and media (La Nación, 2014; Hagelstrom, 2015) about the importance of this sport in the resident's life.

Both institutional and social patterns strongly influence the third one: spatial pattern. This is reflected in the way the inhabitants perceive and interpret their context that leads their consequent responses and actions (individually and collectively). Thus, as mentioned before, they have boosted a spatial development occupying all available land (Villa 31 y 31bis increased its area to 651735 m<sup>2</sup>; Villa 21-24 NHT Zavaleta to 944614 m<sup>2</sup>. In addition, from 2009 onwards, because of the lack of empty land near the slums a vertical development has started in Villa 31 y 31bis. As a result, these areas present high-density percentages (according to the INDEC, 2010: Villa 31 and 31bis had a population of 27013 people living in 6956 houses of 15m<sup>2</sup>; Villa 21-24 NHT Zavaleta had a population of 33245 people allocated in 7761 houses of same measures) producing a clear fragmentation within the formal city, noticeably exposed in maps from different periods. Moreover, every decision, action and behavior (individual or collective) from the residents has a consequence not only for the villas but also for the city. Therefore it is the author's observation that the development of these patterns (institutional, social and spatial) directly influences the urban fabric of the slums and also the CABA. For instance, the spatial development of the villa shows many differences within other neighborhoods of the 'formal' city regarding the urban fabric (construction system, high-density, occupation pattern, corridors instead of streets, overcrowding, scarcity of space) and the formal neighborhoods' fabric (proper construction, wide and paved streets, open spaces such as squares and parks, etc.). Consequently it is argued that the villas' development has triggered an urban fragmentation. This fragmentation is not only spatial but also social, because besides the breakdown of the fabric there is an existent gap between the villeros and the citizens of the CABA. Thus, this gap leads and controls citizens' movements, as the Villas' have become non-desirable places to pass by, visit or even provide services (health services, waste collector, etc.). Hence, the right to inhabit the city and make use of facilities and services has been denied. In addition, the urban fabric is gradually changing because these villas are constantly growing and becoming overcrowded and high-density areas spread around the city.

Question two: What drives the growth of the villas?

The author argues that the drivers of the villas' changes are the initiatives of their residents through the institutional, social and spatial patterns exposed above. As it was discussed before, they are continually seeking for better living conditions and because of the state is not strong enough to deal with their issues, they have to come up with their own solutions. Mills (2012) offers a convincing explanation that when there is no centralized concept to guide the development process of a city from the top down, he states that there is a network of design-build efforts based on taking into account the context, local knowledge, the availability of tools and materials and technical skills. Thus, slums are continually emerging through a dynamic and flexible process in which the decisions are taken according to a need or an opportunity through adaptations (Mills, 2012).

Question three: Are villas experiencing a transition process?

The author argues that the villas are going through a transition process in which many changes have occurred as diverse periods passed (different stages). Both villas have suffered structural transformations over time because the inhabitants were adapting to many different situations. Hence, the character of those places (where the two cases are located) were also transforming from being at first empty lands owned by the state or neglected areas of the CABA, to become huge slums that house more than 40000 people.

As Rotmans et al (2001) have stated a transition has three dimensions:

- The speed of change,
- The size of change,
- The time period of change,

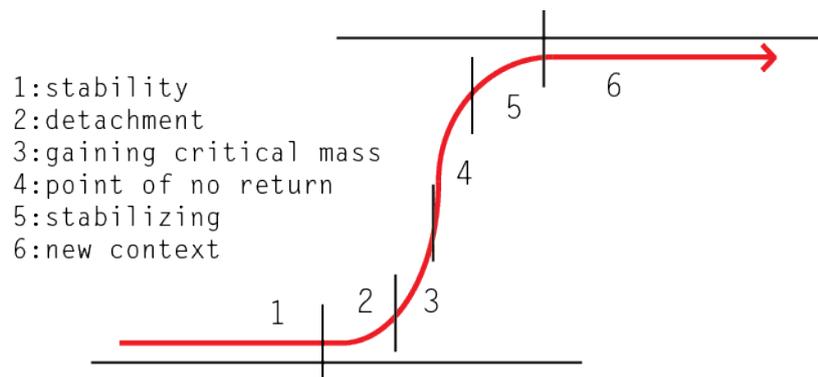
In relation to the case studies, the first dimension, the speed of change is reflected within the villas' population growth. By the year 2004, the Villa 31 and 31bis had a population of 14584 people (INDEC, 2004). Nowadays, the population is reaching approximately 40000 people, almost 50% more than five years ago (La Nación, 2013; Dirección General de Estadísticas y Censos, 2015). Villa 21-24 NHT Zavaleta had a population of 16314 people in 2001 (INDEC, 2001) and nowadays the demographic estimation is around 50000 people (La Nación, 2013; Dirección General de Estadísticas y Censos, 2015).

The second dimension, the size of change is explained through the physical change, the extension of each villa and its consequent influence within the increasing scarcity of space (shown in pictures and maps). The Villa 31 and 31bis had, by the year 2000 an area of 200866 m<sup>2</sup> (Government of the City of Buenos Aires, 2015); nowadays (2015) the area has expanded 450869 m<sup>2</sup> more with a total of 651735 m<sup>2</sup> (Government of the City of Buenos Aires, 2015).

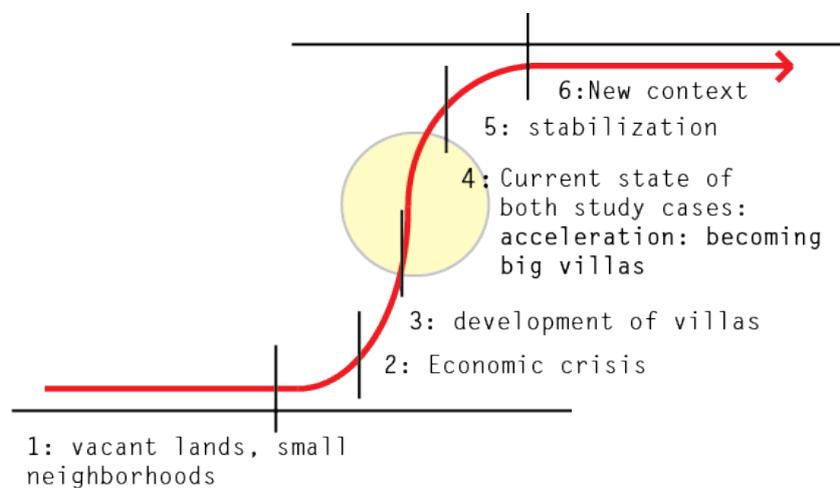
Aires, 2015). In addition, by the year 2000 the Villa 21-24 NHT Zavaleta had an area of 530558 m<sup>2</sup> and currently it has expanded 414056 m<sup>2</sup> more reaching 944614 m<sup>2</sup> (Government of the City of Buenos Aires, 2015).

The third dimension, the time period of change both villas have taken has been similar, since the two have shown an incredible growth from the 2000 onwards in comparison to other slums of the city. From their emergence back in the 1930s, both have presented ups and downs on their development trends (facing socio-economic and institutional issues) until the economic crisis of the 2001 that acted as a driving force that boosted their implausible expansion. Moreover it can be also explained through the logical rapid occupation/ development that both villas have shown (due to the housing demand), especially from the 2000 onwards, where the two case studies have doubled their size resulting in high-density areas (more than three people in a house of 15m<sup>2</sup>)(Government of the City of Buenos Aires, 2015).

Additionally Rotmans et al (2001) explain that a transition goes through different phases in which at the beginning, it does not suffer big changes. This first phase encompasses the period of the Villas' emergence until the year 2000 in which the population and extension of both Villas remained constant. During the second phase, changes start to occur shifting the equilibrium state to a take-off stage mainly because of the different events that were taking place to restructure the country and the society after the dictatorship (democratic governments, privatization, economic stabilization, etc.). Therefore both Villas (as many others) started to be developed becoming the urban poor and immigrants' neighborhoods. The following phase is characterized by the accretion of change that rises causing structural changes under a tipping point and a consequent acceleration stage. The author states that the tipping point is the 2001 economic crisis that hit the Argentinian society affecting all sectors and increasing poverty and social inequality and hence boosting the growth of villas. From that year on, the villas have been growing extremely fast as different events were happening (recovery of the economy, migration flows, etc.) within the CABA. Nevertheless both have not reached the last phase, in which the speed of change decreases and a new dynamic equilibrium reaches a stabilization stage (Rotmans et al, 2001). There are still on the acceleration stage as there are continuously growing (Villa 31 y 31bis shows a vertical growth, while Villa 21-24 NHT Zavaleta is still expanding horizontally). Hence, this study argues that both cases are going through a transition process but they have not reached the stabilization stage since the development of the slums depends on many contextual events that are currently happening. Moreover, upgrading programs (e.g. PROMEBA) need to be implemented for the integration of both villas and their residents within the formal city. Meanwhile the villas' residents will maintain this process because of the social attachment they have with the villa and also their need to realize their needs.



**Figure 6.1:** Transitions model. Source: Adapted from De Roo, 2014.



**Figure 6.2:** Transitions model adapted to the case studies. Source: Author, adapted from De Roo, 2014.

**Question four:** What is important to consider for the upgrading and planning programs? Can the concept of self-organization be used as a tool?

In terms of upgrading and planning programs, it is worth to say that the use of the concept of self-organization could be very valuable for planners and architects if they are able to translate theory into practice. The author agrees with Boonstra and Boelens (2011) viewpoint in which they argue that self-organization could contribute to the spatial, economic, social and political objectives of citizen involvement and hence by acknowledging self-organization, planning will open up to the society with all the multiplicity and pluralism from it. From the author's perspective, it is valid but rather complex to use the concept of self-organization to explain the growth of the city and it also agrees with Mills (2012) in that as self-reproducing systems, slums introduce another dimension to the complexity of cities and the way people understand them will affect their transformation and growth. Therefore there is a need for a proper appreciation of how they work functionally and formally. Once people reach this understanding, they indeed would be able to provide useful insights and explanations for upgrading programs. In addition

as Bolliger et al (2003) clarify self-organization may serve as a perspective to understand the ecosystem complexity and function in a more general framework.

## 6.2 Recommendations.

The aim of this research is to understand how the villas of CABA are organized or self-organized, the transition they have experienced, if the concept of self-organization can be a use as a valuable tool for upgrading programs and based on that theory, explain its growth. In order to analyze these interrogations, a main research question and four sub questions were made. The findings claimed that both case studies have gone through self-organization processes from their emergence until recent times. They have set their own rules throughout the years in order to cope with many difficulties they have faced. They are also self-organized under socio-spatial patterns. They have self-maintained and adapted along their lives because they did not find support from any formal institution and their rights as citizens were not taken into account. Therefore their continuous interaction has stirred their actions to overcome diverse events. It is important to highlight the importance of self-organization as a potential tool since in the end there are processes triggered by the society itself and as it is known, planning is for people, is about making decisions to create spaces in which the community conduct their lives, and also to improve their well-being. Therefore, people should be heard and should be able to enjoy their rights to their cities. Hopefully, planners, policy makers and governmental actors could benefit from these findings in order to deliver better outcomes in relation to policies, plans, upgrading programs, etc. Furthermore, planners could draw lessons from self-organized processes by following its creativities without any constraints (ideologies, studies, beliefs, etc.) since it could provide insights of how a space functions. Therefore planners should consider taking into account the residents perspectives and ideas through a continuous interaction with them as they could offer their perceptions and understanding of their own neighborhood.

## 6.3 Future research.

Nowadays, a variation on how to make or enhance cities can be perceived as more bottom up initiatives (originated by people's interaction) are emerging to deliver solutions as the formal top down system sometimes fails on their duty and neglect the potential of the community. This study then examines the concept of self-organization in relation to slums in CABA. The concept roots are linked to complexity theory that is by nature complex. Furthermore, self-organization processes are initiated by the society in constant interaction as responses of external and internal factors. In the case of the villas, their residents' responses have led to self-governance processes to overcome their problems. In that sense, it could be argued that the residents are acting

as informal planners because they are participating in the development of their area, and as a consequence of the city itself.

During the time of the investigation and analysis of this thesis many others interrogations popped up since it is an interesting and very complex topic. For instance, the author has recognized self-governance processes within the villas as the villeros formed their own institutions. Nevertheless, it has not been analyzed and described in the theoretical chapter. Thus, it is essential to consider future research in order to develop a better understanding related to that topic. More case studies could be analyzed as the CABA has 21 slums. Additionally, international examples (from both the developing and the developed world) would be very useful to compare and discuss identifying similarities and differences with the Argentinian cases. Moreover it is important to highlight the limitations of this thesis, since first, travelling to Argentina to gather primary data was not a feasible option so surveys and questionnaires were not possible to conduct. Additionally, it is worth to mention that the findings are a result of a personal sensitivity, understanding and perception of the topic.

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## APPENDIX A: Table: Statistics Data from Villas and NHT (Transitory Housing)

Villas-NHT	Census Date	Houses	Families	People
1.11.14	1999/2000	3776	5752	19886
3	2003	1410	2023	7551
6	2004	1713	2462	9136
13bis	2000	75	95	360
15	2000	2063	2456	8255
16	1999	26	34	135
17	1999	163	194	755
19	2005	800	1156	3965
20	2004	3444	5236	17820
<b>21-24 NHT Zavaleta</b>	<b>2001</b>	<b>3627</b>	<b>4196</b>	<b>16314</b>
26	2005	115	159	597
<b>31 and 31 bis</b>	<b>2003</b>	<b>2881</b>	<b>4643</b>	<b>14584</b>
Calacita	2003	92	139	430
Piletones	2003	493	778	2606
Av. Del Trabajo	2003	421	517	1869
Rivadavia (9)	2002	1074	1630	5187
Soldati	2002	3261	3496	10773
Illia	2003	621	1029	3501
C.S.R.B.	2002	212	236	599
AU7	2003	174	216	808
Carrillo	2004	752	1032	3898
Total		27193	37479	129029

**Source:** Author (2015) Translation based on a report from Dirección General de Estadística y Censos, Government of the City of Buenos Aires, 2015.

**APPENDIX B: Table: Statistics Data from Villas and NHT (Transitory Housing) from 2010.**

Villa-NHT	Inhabited housing	Population
<b>Total</b>	36003	170054
<b><u>Villa 31 and 31bis</u></b>	<b><u>6956</u></b>	<b><u>27013</u></b>
Asentamiento Rodrigo Bueno	561	1960
Asentamiento Saldias y Asentamiento Parque	119	518
Villa 26	230	885
<b><u>Villa 21-24 NHT Zavaleta</u></b>	<b><u>7761</u></b>	<b><u>33245</u></b>
Asentamiento el Pueblito y Asentamiento Mar Dulce	260	1495
Asentamiento Lamadrid y Asentamiento El Triángulo	241	1520
Villa 1_11_14	4748	26295
Villa 13bis	171	878
Villa 3	1506	9914
Villa 15, Asentamiento San Pablo y NHT del Trabajo	3708	16937
Villa 19 y Asentamiento Maria Auxiliadora	1090	5604
Villa 20	4297	22563
Asentamiento Scapino	428	1625
Villa Piletones	948	5225
Villa 6	1853	9300
Asentamiento Biarritz y Espinosa y Asentamiento La Carbonilla	281	1031
Asentamiento Paredon Lacroze y Asentamiento Fraga	585	2324
Villa Calacita	260	1722

**Source:** Author (2015) Translation based on the 2010 Census from Dirección General de Estadística y Censos. Result Number 856, Government of the City of Buenos Aires, 2015.